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Educational News and Editorial Comment

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ARE THE PARENTS RESPONSIBLE FOR STUDENT STRIKES?

RECENTLY the *Chicago Daily News* published a cartoon showing a youngster who appeared to be reading a report to his class. The "gag line" under the drawing was: "There have been quite a few strikes here and there, but these have not yet spread to the schools in spite of the heavy home work." At about the same time, however, there were several strikes in secondary schools, notably in near-by Gary, Indiana. In this case the issue was the white students' desire to exclude Negro students from one of the high schools, and there is much evidence that the students have the support of a group of adults in the community. It must be remembered that Gary is situated in the northern part of the country, where the practice of segregation is not the accepted pattern as, rightly or wrongly, it now is farther south. A third strike was scheduled for March 5 in an attempt to have the principal of the school transferred

from his post, although an outside investigating committee had exonerated him of charges that he lacked administrative ability and permitted laxity of discipline.

In an effort to avert the third strike, organized groups in the Gary region sponsored a public meeting held on February 26. The speakers, including a Negro pastor, a Jewish rabbi, a state senator, the president of the parent-teachers' association, and representatives of labor organizations, presented the point of view that racial intolerance in Gary itself must be eliminated before the problem of racial difficulty can be dealt with in the particular high school where the tension has been high. As a result of this and several smaller group meetings, the third strike did not take place.

It is not surprising that the strike as a technique of social action should be used in Gary. Many of the parents work in the steel mills, and, at the time of the students' eruption, the strike of the steelworkers was brew-

ing. The role of some of the parents in supporting their children was reprehensible, but the suspicion that this example is not unique is borne out by data appearing in the *Nation's Schools* for February. The responses to a questionnaire sent by that journal to 500 school men showed that, in the opinion of 43 per cent of the respondents, parents were the leading culprits in such situations. The community at large was listed by another 40 per cent as the group chiefly at fault. Pupils alone were placed first by only 3 per cent of the school men. The need for a dynamic program of instruction on the principles of democracy was never demonstrated more clearly than it was in the student strikes in Gary. It is probably too late to modify the attitudes of those parents who supported their striking children. Hope that such violent outbreaks of racial prejudice will not occur again there, or elsewhere, is nourished mainly by promising programs of intercultural education of the sort reported in these columns in the February number of the *School Review*.

EFFECTS OF POSTWAR READJUSTMENT ON YOUTH

TO DATE the educational journals have published little comment growing out of the unprecedented wave of industrial strikes now in progress. When parents are striking for higher wages or improved conditions of employment, what is the effect on the children? If the strike is prolonged and family resources are

depleted, the inference is strong that nutritional standards decline while tension in the home increases. Is the learning of the children in school adversely affected? The writer has seen no studies bearing directly on this question, but the analogous situation which prevailed during the depression of the 1930's would suggest an affirmative answer.

As a matter of fact, it is probable that, as far as many youth are concerned, the economic situation bears a strong resemblance to that of the earlier period. Some evidence pointing to this conclusion is discussed by Edith M. Stern in the *Woman's Home Companion* for March, 1946. She says:

In Detroit today thousands of teen-age boys and girls are idle. They worked during the war but now industry does not want them. Their schooling is incomplete but they don't understand what the schools have to offer. So they loaf, lie late abed, gather in gangs and ramble aimlessly from street corner to street corner—a new lost generation whose plight has gone unnoticed and unremedied.

The author goes on to summarize the interviews with teen-age boys and girls, with school authorities, social workers, and other qualified observers which led her to this conclusion and to the conviction that neither revived job opportunities nor increased recreational facilities will solve the problem. To a group of readers far larger than that reached by any educational journal, she speaks as follows:

More attractive education is the only complete and enduring way to salvage the children scuttled by industry. The Detroit

school's curriculum has failed to interest great numbers of the city's boys and girls. If this were not so, the 1945-46 enrolment would have been larger; Nino and his friends would not have hooted so loudly when I suggested that, since they couldn't get jobs, they return to school. And it is difficult to convince such veterans of the war boom that in the long run it will pay them to finish their schooling; the cries of employers for anybody, no education necessary, still ring too loud in their ears for them to hear the present faint beginnings of "high-school graduates only."

Part of the responsibility for salvaging teen-agers rests with the nation's schools. Education must be made meaningful and interesting in itself. It must stimulate children to explore the riches of life and culture that lie both inside and outside the vocational grooves; it must tie up directly with life, both the part of life that is concerned with money-making and the part that includes family relations, social understanding, and comprehension of the natural and man-made world all around.

But all the responsibility cannot be placed on schools. If parents have no other values than the be-all and end-all of the job, we cannot expect children to have them either. It is, in the last analysis, up to the mothers and fathers to give their children more enduring values to replace the money-is-everything point of view the youngsters gained during the war. After all, the children have only their war experience to go by. Parents know better.

What are the "more enduring values" of the parents? It is not good for the peace of mind of an older teacher to go into this question too deeply. Teachers are accustomed to the complaint that the schools are failing to teach "the fundamentals." In these columns for February Mr. Havighurst commented on this point and suggested better public relations. Surely the de-

velopment of a system of values is among the fundamentals, and probably the schools have failed more dismally in this respect than they have in training boys and girls to read, write, and compute. More and more teachers and administrators have recognized this fact, but here also a great deal of work needs to be done if the general public is to support the diversion of time from what they now regard as the job of the schools to the sorts of learning experiences out of which a defensible system of values can be developed.

A LIBERAL INTERPRETATION OF THE WORDS "MILITARY SERVICE"

PROBLEMS associated with universal military service in peacetime continue to be of concern to educational leaders. Scientists, including mathematicians, are especially concerned because the operation of Selective Service drastically reduced the number of young men preparing for scientific careers. The following excerpts from a report of a Subcommittee of the War Policy Committee of the American Mathematical Society and the Mathematical Association of America, published in the *American Mathematical Monthly* for January, 1946, present a point of view which deserves consideration.

It can safely be said that the military potential of a country does not depend solely upon the size and character of its armed forces. This potential also depends largely upon the technical and industrial talent available and upon the vigor, ability, and training of its scientific and technical experts.

Long-range military planning, therefore, requires that able young men be encouraged both in preparing themselves in basic scientific and mathematical knowledge and in acquainting themselves with the ways in which this knowledge can be put to use in time of war or national emergency. . . .

During the war the United States has followed a sadly shortsighted and unintelligent policy with regard to science and technology by not providing for appropriate annual increments of undergraduate men to be trained in those fields. There are facts at hand which indicate that England and probably Russia have not made a similar error during the war. . . .

We consider it very important that universal military service in peacetime should not be planned in such a way as to interfere with efforts, first, to eliminate as quickly as possible the present shortage of scientists and technologists and, second, to provide for a continuous generous supply of such essential categories of trained citizens in the future.

It has been the traditional American viewpoint that all men should be treated as nearly alike as possible in fundamental respects whenever a call for universal military service is issued by our government. . . .

We shall proceed, then, with the explicit premise that it would be undesirable to suggest the exemption of men with special mathematical talent and that each man, regardless of his abilities, will have to spend one year of his life in military service.

The present rate of increase in the military uses of science and technology convinces one that success in any future war will be dependent on continued progress in science and on the existence of a large reservoir of trained technologists. Thus it is essential that any program for universal military service should be consistent with associated plans for the development of our scientific and technological potential. It follows that the final program should not be organized with the narrow objectives of merely disciplining masses of men and preparing them for handling

existing weapons of war. Hence, the term "military service" should be interpreted in a liberal fashion.

"Military service" should include not only the usual routine service in the armed forces but, also, various other highly technical forms of training which are just as essential for enhancing the military strength of the nation. These types of service should be made available for properly qualified young men under some studied system for differentiation of training in accordance with ability. In particular, the system should provide appropriate advanced types of service in the case of the small but important group having special aptitude for and training in mathematics, the physical sciences, or technology.

Similar arguments have recently been advanced in hearings of congressional committees by representatives of other scientific societies. It remains to be seen whether the Congress will be influenced by such arguments. The development of the atomic bomb, radar, and numerous other scientific instruments of warfare has dramatized, as has never been done before, the power of science and its role in the national defense. Creative work in science is, characteristically, the product of the younger men. Perhaps a year of nonscientific activities would not seriously interfere with their development, but scientists tend to believe that this is a risk which the country should not take.

IS ACCELERATION A GOOD THING?

DURING the war there were many practical arguments for accelerating the schooling of high-school and college students. Boys, in particular, were pressed to finish high school in

three years and to get as far as possible in college before being called to the armed services. Since acceleration has been known and practiced for a very long time, the war served only to bring it to attention as a possibility for the average, rather than for the exceptional, student. In an article on "What Is Acceleration?" in *School and Society* for December 8, 1945, Dean Nils Y. Wessell, of Tufts College, comments: "On the surface, there appears to be considerable disagreement among educators as to the advantages or disadvantages of what we have come to call accelerated study." He points out that our customary measures of acceleration are in terms of units of time, for example, the number of class hours or weeks that the student has spent on a given course. After reviewing some of the assumptions which are commonly made in discussions of this subject, he summarizes as follows:

In spite of the artificiality of our measuring unit and the heterogeneity of students, teachers, and subject matter, we draw broad and sweeping generalizations which cannot possibly encompass such great variability or such wide individual differences. Broad statements about the advantages or disadvantages of accelerated study are of this type. How, under the circumstances, is it possible to say that acceleration per se is a good thing or a bad thing?

Fortunately there are other means of judging the effects of acceleration. Professor S. L. Pressey and his collaborators at Ohio State University have made a variety of studies which they will soon bring out in book form.

One of these articles, by Marie A. Flesher, appears in the *Educational Research Bulletin* for November 14, 1945, and is entitled "Did They Graduate Too Young?" In this study the author compared the post-college records of seventy-nine men and women graduates of the Ohio State University College of Education who finished at nineteen or twenty years of age with a matched group who graduated at the normal age of twenty-two. When compared on most bases, there is no difference between the two groups, but the group graduating younger secured more advanced degrees, got higher salaries, on the average, and were rated somewhat better by their supervisors. In general, the conclusion of Pressey's studies seems to be that accelerating the educational progress of able boys and girls under wise guidance brings no evil effects.

MULTI-SENSORY AIDS IN THE TEACHING OF MATHEMATICS

IN PURE mathematics the notions are abstract and general. This fact is at once one of the main sources of its power and one of the main causes of the failures of some learners. Abstractions lie near or in the unexplored frontier regions of most minds, and the roads to them pass through the more familiar territory of everyday concrete examples. A guidebook which will help teachers map out such journeys has recently been published as the Eighteenth Yearbook of the National Council of Teachers of

Mathematics. *Multi-sensory Aids in the Teaching of Mathematics*, compiled by a committee under the chairmanship of E. H. C. Hildebrandt and published by the Bureau of Publications, Teachers College, Columbia University, emphasizes the principle that students are likely to learn better if touching or handling mathematical materials is added to seeing them and hearing about them. The book includes thirty-six short articles which contain a minimum of theoretical discussion and a maximum of practical information on the preparation and use of demonstrations and exhibits, models and devices, instruments and tools, slides, films, and related equipment. An appendix provides a long list of short descriptions of particular models and devices, bibliographies, lists of films and filmstrips, and the like. The book is profusely illustrated.

No teacher of mathematics can read this yearbook and fail to be inspired toward efforts to make the classroom more of a laboratory where mathematics is learned in the manner of a sculptor shaping clay while he studies a living model. As was to be expected, by far the greater part of the material of the book deals with geometrical concepts. There are as yet relatively few multi-sensory aids to the teaching of arithmetic and algebra, and good motion pictures with sound are practically nonexistent. It is, therefore, encouraging to know that several producers of films are now at work to remedy this situation. Encyclopaedia Britannica Films will,

in the near future, release a film on property taxation suitable for use with classes in arithmetic, consumer education, and social studies. This company will also soon produce films which will make some of the processes of arithmetic much more meaningful for pupils than is usually the case at present.

An additional contribution to the problem of making mathematical education more realistic is found in an article by Lieutenant Henry W. Syer in the *Mathematics Teacher* for January, 1946, on "The Effects of Military Training upon General Education." Following a discussion of the Army's contributions to education, Syer elaborates a plan for a department of teaching aids in a school system. He also develops, at some length, plans for a laboratory course in mathematics. Thus we find, growing out of experiences of the war years, a revival of the principles enunciated nearly fifty years ago by John Perry in England and by E. H. Moore and others in this country. Their recommendations have, for the most part, remained a nonfunctional element in the training of teachers of mathematics. The current interest in this approach to mathematics seems to have a much greater chance of getting somewhere. The yearbook of the National Council and Lieutenant Syer's article provide much-needed, up-to-date plans and suggestions. Producers of visual aids and of models in plastics or the new light metals are perfecting their techniques. The provision of

space for laboratory work in the schools, the development of adequate guide sheets or other learning aids written for the students, and the question of financial support are problems remaining to be solved.

TWO YEARBOOKS OF 1946

A VALUABLE addition to the series of yearbooks published by the American Association of School Administrators bears the title *School Boards in Action*. Designed primarily as a handbook for members of boards of education, this volume explains the functions of the school board and describes procedures which have their sanction in authoritative interpretation of the legal basis of public-school organization and of the long experience of American communities in the management of their dominant cultural institution.

In its analysis of the status and operational procedures of boards of education, the committee responsible for the preparation of this yearbook was guided by the personal observations and professional writings of many responsible leaders in the field of school administration. Much factual information was available to the committee through reports prepared by more than three thousand city and county superintendents. The nine chapters of the yearbook provide effective guidance for board members on problems relating to their personal services in behalf of the schools, their relations with the executive officers and other employees, their responsi-

bilities with respect to finance and business management, their relations with the public, and their opportunities for planning improvements in the program and the facilities of the school system in keeping with the developing needs of the community.

The volume is of equal value to administrative officers and other members of the school staff. It is available on order to the American Association of School Administrators, 1201 Sixteenth Street, N.W., Washington 6, D.C. The price is \$2.00.

The 1946 publications of the National Society for the Study of Education, constituting the Forty-fifth Yearbook of the Society, include two volumes, *The Measurement of Understanding* and *Changing Conceptions of Educational Administration*. Each of these volumes exemplifies the best thought of the times regarding an all-important phase of educational procedure: the former, with respect to the evaluation of the results of teaching; the latter, with respect to policies and practices underlying the executive management of school systems.

The introductory chapters of *The Measurement of Understanding* discuss the nature and characteristics of understanding as distinguished from other products of learning, such as skills and factual information, and stress the importance of utilizing in the testing program an appropriate selection of test items which will elicit specific evidence of understanding. The major portion of the volume is devoted to the presentation of

illustrative test materials adapted to the measurement of understanding in areas represented by the principal subjects of instruction in elementary and secondary schools.

Changing Conceptions in Educational Administration is presented by the Society at this time in recognition of the need for a reorientation of school administration in the light of emerging conceptions of the role of professional leadership in promoting progress toward the ideal of democracy in education. Particular problems in educational administration with which this yearbook deals include the functions and services of state departments of education, organizing the personnel of local school systems, directive procedures in relation to the curriculum, co-operation with other community agencies, financing the educational program, providing adequate housing and equipment, and the training of professional personnel.

These two volumes may be procured through the University of Chicago Press. *The Measurement of Understanding* is priced at \$3.00 in cloth, \$2.25 in paper covers; *Changing Conceptions in Educational Administration*, \$2.50 in cloth, \$1.75 in paper.

HOW DO PUPILS GET ALONG UNDER STUDENT TEACHERS?

HIGH-SCHOOL principals and teachers often wonder whether their pupils suffer when taught by college students who are doing practice teaching. A study by Raymond Robert Ryder entitled *Effect of Stu-*

dent Teaching on Secondary-School Pupils in Achievement and Attitude, issued as Number 51 of the Studies in Higher Education of the Division of Educational Reference at Purdue University, gives an answer to this and other important questions.

The author studied the achievement in various school subjects of nearly a thousand high-school pupils taught by sixty-seven student teachers. These pupils were paired with others in the same subjects and classes taught by regularly employed and licensed high-school teachers. The investigation extended over five semesters, and achievement was measured by administering the state high-school tests for Indiana at the beginning of the training period for student teachers and again seven weeks later. The attitudes of the students toward their teachers and subjects were also evaluated. The author's main conclusions follow:

1. High-school pupils learn just as much when taught by supervised student teachers as when taught by the regular teachers. Pupils with less than average ability learn more when a student teacher is assigned to the room. This fact is probably due to the two reasons (1) that the student teaching is done under the close supervision of the University supervisor and the critic teacher, with the latter present in the room practically all the time, and (2) that more attention is given to learning difficulties under the type of supervision provided than when the regular teacher works alone under comparatively unsupervised conditions. Better-than-average, or the brighter, pupils tend to learn more also. It is not the student teacher alone but the conditions under which he works which account for the difference. Instruction

is more likely to be adapted to the individual needs and difficulties of the pupils when a student teacher has been assigned to a class under the conditions described in this study than when the regular teacher works alone with little or no classroom supervision.

2. Pupils are not harmed by having student teachers for instructors if the latter are carefully supervised—in fact, they are more likely to be benefited.

3. Pupils have a better attitude towards regular high-school teachers than they have towards student teachers—that is, they like them better than student teachers. However, as the latter gain in experience there is a significant improvement in the pupils' attitude toward them.

4. Bright pupils have on the average about the same attitude toward student teachers as dull pupils.

5. Pupils think no less of school subjects when taught by supervised student teachers than when taught by the regular teachers. There is no evidence to support the view that pupils acquire a strong dislike toward any high-school subject just because they have had a student teacher for an instructor in it.

6. Good student teachers are better liked by their pupils than poor student teachers. Their personality does not diverge so far from the average as the poor. In other words, they are not domineering on the one hand nor egocentric introverts on the other, but are characterized rather by balance, poise, and the absence of extremes in personal qualities.

SIGNIFICANCE IN PAPER COVERS

A program in health A bulletin just released by the Educational Policies Commission and the American Association for Health, Physical Education, and Recreation carries the title *Health and Physical Fitness for All American Children and Youth*. Much has been previously published on the subject, but this brief

formulation of policies is so well put and has such influential backing that it will doubtless be frequently quoted for years to come. The main thesis is stated as follows:

We hold that all American children should have the opportunity to grow in health and physical fitness.

To this end we recommend nation-wide provision for the following minimal program for every child in our country, whether in a large city, or small town, or on the farm:

1. A complete physical examination at least once in each two years, including careful attention to vision, hearing, and teeth.

2. Prompt and persistent follow-up of the physical examination with successful provision for all needed corrective and protective measures.

3. Instruction based on scientific information which will lead to the formation of desirable habits, attitudes, and appreciations in physical and mental health.

4. Special instruction in diet, with provision of at least one appetizing, wholesome meal each day, provided by the school if necessary.

5. Opportunities for play and exercise which will provide needed physical activity and develop good muscular co-ordination.

6. Participation in a rounded program of recreational activities which will carry over into after-school life.

We hold these services to be so important in the development of American children and youth that it should be the business of every school system to provide this program with such state and federal aid as may be necessary.

The thirteen pages which follow this forthright introduction hammer home, in a very few words, point after point about school health programs. Progressive school men and women do not need to be convinced on these points. If they are well trained and

have kept up to date, they already subscribe to all the essential elements of the program outlined in this pamphlet. It is the so-called "hard-headed businessmen," some of whom sit on almost every board of education, who must be sold on the need for a health program. They are likely to argue that the health of the children is the responsibility of the parents, or of the parent-teachers' association, or of the county or city board of health—at any rate, that it is not the responsibility of the schools. This statement sponsored by the Educational Policies Commission should be particularly useful in informing board members who hold such views, and the segment of the community that they seem to represent, of the needs in this field. It should be placed in the hands of every board member and should also receive adequate publicity through appropriate local channels. Copies may be obtained at ten cents each from the National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C.

Consumers' The Commission on mathematics Postwar Plans of the National Council of Teachers of Mathematics has cooperated with the Consumer Education Study of the National Association of Secondary-School Principals in preparation of a pamphlet on *The Role of Mathematics in Consumer Education*. The pamphlet includes sections as follows: (1) "Nature and Purpose of Consumer Education,"

- (2) "Problems in Correlating Consumer Education and Mathematics,"
- (3) "Organizing the Program,"
- (4) "Teaching Aids," and (5) "Perspective."

The Commission believes that the mathematics of consumer education should be taught within the existing pattern of subject-matter organization. At the elementary-school and junior high school level, no separate courses are recommended. The following quotation presents a summary of the point of view on this question:

This section has pointed out that we do not face an either-or situation in which we have to decide to teach arithmetic or consumer education. We can teach more and better arithmetic in the time we have if we use in a sensible way the realistic materials that consumer education provides. We can manage affairs so that children will not only learn the arithmetic but will also pick up a lot of useful information about human affairs, fix habits that will be effective later in life, and above all establish social attitudes that will pretty largely control what they will later do as adult citizens. In all that the teacher need not even mention the phrase "consumer education," though the majority of good teachers will no doubt prefer that their pupils be clearly aware of both sets of goals—those that relate specifically to consumer education and those that are used in building the broader concepts of arithmetic.

After presenting arguments both for and against a separate course in the senior high schools, the Commission states that it believes the arguments for providing a separate course in consumer mathematics as an elective in Grades XI and XII are altogether convincing. An outline of the content

of nine suggested units for such a course is developed in terms of the questions or problems with which the units should deal. Helpful suggestions on the organization of the work and on teaching aids are included.

This statement on the role of mathematics in consumer education may be regarded as definitive for the time being. Every school should survey its present curriculum in the light of this report. A majority of schools will probably find that they will need a rather extensive revision of their programs if their students are to reach the goals stated or implied in the pamphlet. A copy has been sent to every member of the sponsoring organizations. As long as the supply lasts, single copies may be obtained free on request to the Consumer Education Study, 1201 Sixteenth Street, N.W., Washington 6, D.C. Additional copies are fifteen cents each. Although twenty thousand copies were printed, the edition is already nearly exhausted and the type has been thrown down. Consideration is being given to the problem of providing additional copies if there is sufficient demand for them.

Handbook on the U.N.O. Although much has been published on the U.N.O. in the newspapers and magazines, it takes a skilled teacher of the social studies to use the materials in such a way that his students acquire a comprehensive view of the organization and its problems. A new booklet designed specifically to help in this situation is en-

titled *United Nations Organization: A Handbook of the U.N.O.* The book is divided into twelve short main sections. The first discusses how the United Nations idea grew. This is followed by nine sections, each devoted to a special topic, and by a section containing questions and "Answers Everyone Should Know." The final section contains the complete charter of the United Nations. A glossary of the terms used in the charter and an index conclude the booklet. Most of the sections are followed by questions, exercises, and suggestions for study. Many cartoons high-lighting important facts, and a map showing the fifty-one countries which signed the charter, are included.

The booklet may be obtained at twenty cents a copy (or fifteen cents a copy, plus postage, in quantities of ten or more) from Charles E. Merrill Company, a division of the American Education Press, 400 South Front Street, Columbus 15, Ohio.

Spelling in high school Fred C. Ayer reports an analysis of twelve representative books for high-school spelling in a recent publication, *A Study of High School Spelling Vocabulary*. The entire list of 15,542 different words found in these books is given alphabetically, with a tabulation of the number of spellers in which each word was found, its classification in Thorndike's *A Teacher's Word Book of the Twenty Thousand Words Found Most Frequently and Widely in General Reading of Children*

and *Young People*, the place of the word in Horn's *A Basic Writing Vocabulary*, and the popularity and median grade placement in the *Betts Spelling Vocabulary Study*. Probably the most significant fact disclosed is that 48.7 per cent of the total number of words were included in only one speller. In contrast, only 36 words, or 0.2 per cent, were included in all twelve of the spellers. This study should be of great value to those who are giving attention to instructional problems in the language arts at the high-school level. The complete report of 128 pages may be obtained in paper covers for \$2.00 from the Steck Company, Austin, Texas.

English for the slow learner As a rule a course-of-study outline makes dreary reading. One of the best that the writer has seen, and one which is an exception to the rule, is "A Course of Study in English for Z Sections in Faribault High School" by Agnes McCarthy. In her brief discussion of the students for whom the course is designed, the author says:

Since these children come, for the most part, from the poorer homes of the city, economically and culturally, they are less social than other groups and contribute more than their share of the discipline problems of the school. The more socialized forms of classroom procedure are seldom tried with them for the reason that they don't know how to act under such conditions. The lack of interest and poor work habits which characterize these classes are due, at least in part, to the practice of giving them work unsuited to

their interests, needs, and abilities. They get into the habit of expecting not to understand, and the teacher, realizing their limitations, attributes their failure to low I.Q.'s. Some really conscientious teachers refuse to use material suited to the abilities of these students because of a fear of "lowering standards." For some reason they feel that it is preferable for a student to fail to understand the uses of the semicolon, and to get no meaning from Emerson than for him to write meaningful simple sentences and to read with understanding and enjoyment an article from the *Saturday Evening Post*. One teacher remarked that, as far as he was concerned, a student might just as well not read at all if he were going to read *Collier's* and *Liberty*.

This is not the attitude taken by the majority of the faculty or the administration.

In highly intelligent fashion, a longer section discusses "Teaching English to Slow Learners," which can be read with profit by all teachers. The remainder of the book outlines a program for English instruction for each grade from VII through XII. For each grade the program includes listening, speech, written composition, usage and mechanics, reading and literature, motion pictures and radio, and reading units. The book is far more than an outline of content. It is filled with suggestions on methods appropriate for use with slow learners. The reading units include extensive bibliographies of library books, with the grade level indicated. Usually the recommended books are of a level of difficulty well below that which is considered normal for the grade under which they are listed.

Whether or not a school operates

courses for students classified as to ability, it seems to the writer that most teachers of English would find this material worthy of careful study. Orders for the book should be addressed to Miss Agnes McCarthy, Faribault High School, Faribault, Minnesota.

Education in safety A new handbook for teachers of home economics, entitled *Safer*

Home Living, contains many suggestions for work in safety education. According to the pamphlet, statistics show that since 1933 there have been 30,000 or more fatal accidents per year in homes. In addition to these deaths, between 4,000,000 and 5,000,000 people have been injured and approximately 130,000 permanently disabled in home accidents annually.

The booklet first gives plans for a home safety clinic which will gain the interest of the community and get information to the public. The next section presents three problems for study and suggests activities for exploring them. It includes a check list of forty-four items for the purpose of making a survey of home safety hazards. Problems of safe home management, safe child care and training, safe laundering, care of clothing, meal preparation, and food preparation are the topics outlined in other sections.

Many of the rules for home safety seem to be so obviously sensible that it is hard to realize that people need instruction on them. They are the

sorts of things that intelligent people do as a matter of course. One forgets that accidents have a way of happening unexpectedly. The writer now realizes that the place he chose for hanging a shovel in his garage was poorly located, but he had to have the sharp edge of the shovel land on his toes, on a dark night when the light switch failed to work, before this fact was painfully brought home to him. The suggestions in this handbook will help to sensitize students to the problems of accident prevention, and some of the rules may stick in their minds long enough to enable them to avoid some of the dangers which apparently haunt homes, waiting for the unwary. The material is put up in very attractive form and may be obtained for fifty cents from the School and College Division, National Safety Council, 20 North Wacker Drive, Chicago 6, Illinois.

Another booklet recently published by the National Safety Council is *Student Safety Activities*. It is designed to promote safety education through a democratically operated "student safety organization." The booklet explains (1) "The Place of the Student Safety Organization in the School or the Community," (2) "Starting a Student Safety Organization," (3) "Function and Operation of Committees," and (4) "Safety Activities." This well-written and generously illustrated pamphlet should prove extremely useful to any group wishing to further the safety program in a school.

PROCEEDINGS OF EDUCATIONAL CONFERENCES

IN CONFORMITY with previous practice, the proceedings of three of the conferences held by the Department of Education of the University of Chicago in connection with its summer session are being issued in published form. These conferences regularly deal with current problems relating to (1) the teaching of reading at all levels of instruction, (2) the administration of schools and school systems, and (3) the programs and management of different types of higher institutions.

The volume reporting the proceedings of the reading conference in 1945, entitled *The Appraisal of Current Practices in Reading* and edited by William S. Gray, includes a series of articles designed to stimulate critical thinking concerning current practices in reading, to set up criteria of appraisal of teaching procedures, and to point out needed changes in reading programs and in the types of guidance provided.

Forthcoming Developments in American Education, edited by William C. Reavis, reports discussions at the Conference for Administrators of Public and Private Schools, which considered such problems as instructional materials and methods, professional improvement of teachers, construction of school plants, organization of city school systems, and school and community planning.

Emergent Responsibilities in Higher Education, edited by John Dale Russell and Donald M. Mackenzie, considers responsibilities placed on colleges and universities to meet postwar conditions and describes principles and practices formulated by various institutions in carrying out the new tasks.

These three volumes are available on order addressed to the University of Chicago Press. Each is priced at \$2.00. A special price of \$5.50 is allowed on orders for the set of three volumes.

MAURICE L. HARTUNG

WHO'S WHO FOR APRIL

Authors of news notes and articles

The news notes in this issue have been prepared by MAURICE L. HARTUNG, associate professor of the teaching of mathematics and teacher in the Laboratory School at the University of Chicago. LESTER J. SCHLOERB, director of the Bureau of Occupational Research of the Chicago public schools, discusses the place of guidance in secondary schools and points out some of the problems which arise in setting up and maintaining an effective guidance program. SETH P. PHELPS, teacher in the Laboratory School of the University of Chicago, presents the results of a study made of the work experiences gained by ninth- and tenth-grade pupils of the Laboratory School during the summer of 1945. MYRA Z. ROBINSON, teacher of science in the Horace Mann School, Gary, Indiana, explains how a fused science course can contribute to general education and help attain a democratic way of life. ROBERT WHITE, JR., principal of the Burlington High School and Junior College at Burlington, Iowa, in the second in a series of articles

regarding the feasibility of reorganizing school systems according to the 6-4-4 plan, deals with the problems of housing which would be confronted in such a reorganization. G. F. EKSTROM, assistant professor of agricultural education at the University of Minnesota, reports the results of an extensive study of the reasons why farm children in two Minnesota counties leave school. The selected references for this issue were prepared by PAUL W. TERRY, professor of psychology at the University of Alabama.

Reviewers of books

CARROLL D. CHAMPLIN, professor of education at Pennsylvania State College. RAYMOND E. TROYER, teacher at Lake Forest High School, Lake Forest, Illinois. CARLETON P. MENGE, graduate student in the Department of Education at the University of Chicago, recently the commanding officer of the Reconditioning Annex, Station Hospital, Camp Gruber, Muskogee, Oklahoma. ROBERT L. FLEMING, graduate student in the Department of Education at the University of Chicago.

GUIDANCE PROGRAMS AND PROBLEMS AT THE SECONDARY-SCHOOL LEVEL

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*

WITH conditions as they are now, it takes courage to discuss programs and problems in the field of guidance at the secondary-school level. More now than ever, programs and their accompanying problems are subject to needed changes and adjustments. In fact, in times such as these the most successful program in the field of guidance is that which can guarantee adaptability to meet changing demands.

Even under these conditions, six phases of guidance may be presented which, it is believed, are generally accepted and which have some accompanying problems needing discussion and evaluation. There is no intention to be all-inclusive in presenting these six phases. There are others which might be mentioned and which may be just as important as those being considered here. These are offered because they are among those that should receive major consideration.

ORGANIZATION OF GUID- ANCE PROGRAMS

The first phase of the guidance program is concerned with organization. As we look at the history of guidance

at the secondary-school level, we can say with reasonable confidence that there has been a general trend toward a minimum of centralization of the guidance organization and a maximum effort to distribute the functions within and among respective schools. There was a time when it was considered best policy to superimpose a guidance program upon individual schools or school systems. Policies were established, personnel assigned, and pay rolls provided on a centralized-organization basis. More recently the trend has been toward a recognition of the need for an indigenous growth. The assumption is that the program is ineffective if it does not grow from within. More and more the trend is toward small central organization with supervisory relationships, the active program being located in the individual school situation. This trend, in turn, means that guidance is becoming a phase of general education; it is not something tacked on or added. It is a part of each school situation where the need is felt and where the organization is provided without being brought in from the outside.

In connection with this aspect of

the guidance program, there is a problem which should be recognized. Most persons agree that the trend toward growth from within is desirable. This trend, however, makes it difficult to conduct an effective guidance program when the principal of a particular school does not recognize his responsibilities in connection with the formulation of a functioning organization. Now more than ever, administrators need to recognize the values of a guidance program. This need places definite responsibility on those who teach courses in administration. It is hoped that poorly trained administrators will not tend to break down the wholesome trend toward the growth-from-within type of guidance program which is most effective in each school.

KEEPING RECORDS

A second phase of the guidance program deals with records. A record system has always been considered a part of the program, and records existed before the term "guidance" was used. An effective personnel record is now generally accepted by all school systems, while not many years ago a very sketchy type of record was considered sufficient. The current trend toward the use of a cumulative record, which begins as early as kindergarten age and follows the individual student on through high school and even through college, is a significant step in the guidance field. Some schools go still further and provide an individual file folder on each individual. Records such as these guarantee more and

more service to individuals so that they are treated in school in accordance with needs revealed in their records. This trend is not limited to schools. It is a general policy in the armed services, in social case work, and in industry.

This phase of the program is not without its problems, two of which may be mentioned. A serious problem arises when records are not used effectively. A well-developed system which does not include an organization for the effective use of records is wasteful in time and money and, more important, is ineffective in serving the individual student. The tragedy of the well-organized, comprehensive file reposing unused in beautiful file cases and folders represents a serious problem in many school systems. Consequently the guidance program that includes a comprehensive record system must provide the organization which assures the effective use of such records. Such organization must provide accessibility, easy referral, clerical help, and means of keeping records up to date.

A second problem concerns the so-called "dead" files. It is recognized that personnel files vary in their degree of usefulness after students leave school. These files become inactive but not entirely useless as students leave school. The likelihood of their being used becomes less and less as time goes on, and school systems soon find themselves with the problem of what to do with inactive and dead files when certain individual cases may require

attention and referral only occasionally. Since no one knows which of these cases may require attention, all the files must be kept. What to do with them is becoming a problem in many school systems. Should a separate room be provided apart from the personnel office? Should separate file cases be purchased? Should the records be wrapped up and stored away? Should they be condensed and summarized in such a way that only a very small part of the record is kept? Might it be feasible to photograph the records on microfilm? This problem is being recognized gradually and must be met by school systems, not by discarding the record program, but by finding an effective means of maintaining a permanent file.

THE TESTING PROGRAM

A third phase of guidance deals with the testing program. Tests and measurements have become a distinct part of guidance programs throughout the country. In recent years these have taken on new and greater meaning because of the developments in the use of tests in industry, in institutions of higher learning, and in the armed forces. Tests are being used as screening devices in a great many situations. They are used prior to training; preliminary to placement in school or employment; and as a basis for retraining, promotion, or advanced status in a great variety of situations. They are no longer peculiar to schools. They have found a place in practically all phases of American life. School sys-

tems have become a distinct part of this development and are using tests in order to be of maximum service to individual students. This trend is wholesome provided the tests are used guardedly and effectively.

The more recent developments in the armed services are of further significance. The use of credits determined by the United States Armed Forces Institute and of the General Educational Development Tests as a phase of a progressive educational program deserves watching. If recommendations now being made in the use of these tests are well founded and justified, then tests are going to occupy an even larger part in the guidance program of the schools. This trend is likely to lead us to the point where we shall need to re-evaluate the function of the secondary school in American life.

This phase of the guidance program is not without its problems. Too many schools have good testing programs but have failed to provide the means for effective use of the test results. It is necessary for each school to face this problem and to find the right answer before there is any further development of the program. Another older problem continues, namely, how to guarantee reliability in the use of tests by being positive that they are administered properly, interpreted wisely, and used with discretion.

Tests as a guidance technique have taken on new meaning. Their further development and use deserve careful scrutiny. Any program such as this which tempts schools to "get on the

band wagon" requires continuous and careful evaluation.

DISSEMINATION OF VOCATIONAL INFORMATION

A fourth phase of guidance programs at the secondary-school level concerns the method of disseminating guidance information of an educational and vocational character. At the secondary level there are probably few separate classes in which educational and occupational information is given on an intensive basis. There seems rather to be a trend toward giving this type of information extensively throughout all grades. This trend follows three assumptions which are more evident now than they were some years ago when intensive treatment seemed to predominate.

The first assumption is that all teachers must accept some responsibility for providing on an extensive basis for that type of educational and vocational information which they are qualified to give. That is, all subject teachers should teach the vocational implications of their subjects and help students in their possible development of those interests which are related to the subjects being studied. During recent years teachers have been more frequently trained in assuming their guidance responsibilities than was previously the case. Consequently it is safer to assume that some phases of the extensive emphasis on vocational information may be placed in their hands.

The second assumption is that spe-

cialists are available to be used by teachers and administrators in referring students requiring special attention. As information is given extensively throughout all school years to all students, individual cases arise which need a specialized type of guidance, and specialists must be available for this type of guidance.

The third assumption is that students vary in the extent to which they can profit from the educational and vocational information given. When information was provided intensively during a given semester, the assumption that all the students in the class were ready to profit from the information provided was undoubtedly false. Only by a planned program providing continuously the information that is vital to the students' educational and vocational choices can one guarantee service to all students. This trend has placed on the schools important group-guidance responsibilities throughout the range of high-school years.

There are problems in connection with this trend. Many teachers and even administrators are not yet qualified to assume their individual responsibilities in promoting and giving extensive educational and vocational information. This is not so true of younger teachers and administrators.

Another difficulty is that, while many school people believe in giving this information extensively, the year ends with their having done little or nothing about it. At the opening of the school year there must be set up a well-planned, scheduled, and organized

program which will guarantee information in varying degrees and at varying levels for all students.

School personnel must further recognize the need for intensive treatment before students leave school. Thus self-appraisal and career information may need to be concentrated in the later school years in such a way that some of the current vocational and educational trends may be studied intensively because of the need for this information in the immediate future. It may be wise, therefore, to provide more intensive treatment near the end of the student's career in the school.

NEEDS FOR INDIVIDUAL COUNSELING

A fifth phase of guidance at the secondary-school level emphasizes the growing need for individual counseling. Schools seem to be assuming more responsibility in setting up programs which guarantee individual counseling service for the entire student body. The need for this service becomes more and more evident as curriculums become more flexible and students are faced with the need for making more individual choices. Changing patterns of occupations are also a factor. The growth in numbers of educational resources available to the average student makes it necessary to provide for individual treatment. The many scholarships available and the new and varied employment opportunities open to young people likewise point to the need for individualized counseling.

The increasing concern for drop-outs and the observance of child-labor laws are additional factors tending to increase the emphasis on an individual approach.

The growing trend for providing individual guidance service has affected classroom schedules and the traditional viewpoint that a school is made up of a number of classes in subject areas. The school's responsibility now goes far beyond this narrow program.

Problems in this connection are concerned with the slowness with which some teachers and school administrators are willing to accept this new responsibility. Many are ready to introduce into the school system those techniques and phases of organization which result in the need for individual counseling services. They hesitate, however, to provide the staff needed to carry on this service. Another problem in this same connection has to do with the need for providing well-trained counselors. An unsuccessful teacher should not be assigned to this job. A good counselor must be well trained in the appropriate procedures, and administrators and teachers should recognize that professionally trained people are needed in the school to do individual counseling. A program is almost sure to fail unless this need is recognized.

COMBINED PROGRAMS OF SCHOOL AND WORK

A sixth trend in the program of guidance at the secondary-school level deals with the combined school-and-

work program which has developed during the war period. During recent years administrators have come increasingly to recognize the place which part-time work can take as a self-guidance technique for the student. Work has in it some inherent guidance values which help the student in his future educational and vocational decisions. Some administrators have come to recognize this work experience by making it a part of the personnel record. During the war period many schools assigned special persons to schedule the students' programs for part-time work. With this trend toward a recognition of these guidance values has come a parallel awareness of the danger of replacing a wholesome educational experience by an employment experience during high-school years. A number of school systems have gone "all-out" in granting school credits for successful work experience. However, most have been somewhat cautious in this respect and have sought to find and use values which may come without granting subject-area credits.

A problem which arises in a new way in this connection has to do with the best type of co-operative school-and-work program. How can types of

work be screened in such a way as to use for educational purposes only those that have specific educational merit? What is the best type of co-operation which may be built with employers? How can one guarantee best co-operation even when jobs are scarce? Do schools have the staff and facilities to provide for the necessary educational supervision as a school-work program develops? Unless these problems are faced, the trend during recent years toward using work and study as a guidance technique is likely to decline. Until school personnel see all aspects of the problems involved, it might be far better for them to have an attitude which indicates co-operativeness and not an aggressive enthusiasm which leads into administrative as well as accrediting difficulties.

It is interesting to review guidance practices with their accompanying growth over the past three decades. This article has pointed out only six phases of the guidance program at the secondary-school level which seem to the writer to have significance. A recognition of these trends together with their accompanying problems should be faced by the many educators who are serving our young people.

WORK IS VITAL TO EDUCATION

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*

THERE has been much talk about our young people and their way of life. Adults are quick to criticize the boys and girls as being self-centered and lacking in responsibility, but World War II demonstrated what our youth can do when given a chance.

One of the jobs of schools is to educate youth for citizenship in an adult world. Urban boys and girls seem to fare quite nicely. They go to good schools, belong to clubs, participate in athletics, attend dances and parties. However, the opportunity for real work experience, which is an essential part of adult citizenship, is too often denied them until they are nearly grown. The more serious-minded student may long to assume a measure of self-direction at an earlier age, but he has little opportunity to take even a small part in the world of his future. He may want to work, but, as soon as he applies for a job, he finds himself competing with others of his own age, as well as with adults. Since 1910 the proportion of young people in gainful employment has declined. Employers are reluctant to hire young people when a large number of trained and experienced adults are available. Just where and how, then, are young people going to occupy their out-of-school time except in pleasure?

The American Youth Commission of the American Council on Education brings this problem to light in a challenging manner.¹ The Commission believes that work offers a focus for a new organization of life-habits. The youth who works develops a new standard for personal behavior; he has to master skills in the use and care of equipment; he acquires the idea of giving an honest day's work; and he learns the significance of being punctual.

Wages offer an income differing from his allowance or "pin money" because he has earned the money himself. Skill in wise expenditure of income is secured through practice, and he begins to gauge his expenditures by the amount of effort expended in the earning of his wage. He can acquire a greater sense of personal worth by contributing to the welfare of his family. His personal growth is enriched in many ways. With proper guidance, he understands more clearly that work, either intellectual or physical, is the foundation for acceptable participation in the busy grown-up world. The American Youth Com-

¹ *Youth and the Future*, pp. 15-18. The General Report of the American Youth Commission. Washington: American Council on Education, 1942.

mission, referring to the fundamentals of education in terms of the objectives that have become appropriate in our modern world, says: "These objectives must include the effective preparation of young people for life in all its aspects—for work, for health, for use of leisure time, for home membership, and above all for the obligations of citizenship in a democracy."²

Of course many youths of high-school age must seek employment for economic reasons, but, in the writer's opinion, it is no less important that students who are not driven by economic necessity should also secure the education which lies in work experiences. Furthermore, since all groups of our citizenry must cooperate in working out our world problems, it is of vital importance that all our young people participate in common experiences at an early age in order that they may be better prepared to attack together the problems which will face them in the world of tomorrow.

A STUDY IN ONE SCHOOL

The importance of work in the education of present-day youth led the faculty of the Laboratory School of the University of Chicago to learn more about the work experiences of the students in that school. In this institution, which has a six-year elementary school and a four-year high school, a large percentage of the children come from homes in the upper-middle economic group. Both

because of economic circumstances and the pressure of school work, few of the students hold part-time jobs during the school year.

The school operates no placement bureau and consequently has no record of the work experiences of its students. In order to obtain information about the work experiences of the ninth- and tenth-grade students, a questionnaire was devised to throw light on the experiences of these students during their summer vacations. The questionnaire sought to learn about the kinds of work done; the length of time employed; the hours spent daily on the job; the remuneration; the students' reactions to work experiences; the benefits other than monetary that were received; and the number of students who wanted work the next year and the reasons for wanting or for not wanting to work.

SUMMER WORK EXPERIENCES OF BOYS AND GIRLS

Of the 231 students enrolled, returns were received from 198, or 86 per cent. It was thought wise to divide these returns into four groups: ninth-grade boys, tenth-grade boys, ninth-grade girls, and tenth-grade girls. The students were either fourteen or fifteen years of age. A further division was made to compare the students who worked with those who did not work.

The reader will note from Table 1 that 87 per cent of the boys and girls in the two grades who worked want jobs this coming summer. The percentage of tenth-grade boys who

² *Ibid.*, p. 116.

want to repeat their work experience is larger than the corresponding percentage of ninth-grade boys. The added maturity of a year's growth may be a factor in this difference. All the girls who worked want to repeat the experience. Strikingly enough, the

TABLE 1

DISTRIBUTION OF 69 NINTH- AND TENTH-GRADE BOYS AND GIRLS WHO WORKED AND 129 WHO DID NOT WORK DURING THE SUMMER OF 1945 ACCORDING TO DESIRE FOR WORK IN THE SUMMER OF 1946

SEX AND GRADE	STUDENTS WANTING TO WORK IN 1946		STUDENTS NOT WANTING TO WORK IN 1946	
	Number	Per Cent	Number	Per Cent
Boys who worked in 1945:				
Grade IX.....	17	74	6	26
Grade X.....	27	90	3	10
Girls who worked in 1945:				
Grade IX.....	2	100		
Grade X.....	14	100		
Boys who did not work in 1945:				
Grade IX.....	5	16	26	84
Grade X.....	6	21	23	79
Girls who did not work in 1945:				
Grade IX.....	10	23	33	77
Grade X.....	9	35	17	65

figures were nearly reversed among those who did not work during 1945; only 23 per cent of these students want to work this summer. It cannot be assumed, however, that the work experience itself is responsible for the difference in attitude toward work experience. Such factors as parental permission, attitude of the home toward work, economic circumstances

(although there is apparently little difference in this respect between the families of the students who did and of those who did not work), as well as the individual's own health and attitude, should be considered in a complete interpretation of these data. There is also the question of maturation, which differs greatly at this age, and, too, the degree of emancipation from parents.

KINDS OF JOBS AND AMOUNT OF TIME WORKED

What kinds of work did the students do? How many days a week did they work? How long was the working day? How many weeks did the jobs last? These factors are of vital importance when one considers the work of high-school students. The returns disclosed that the following kinds of jobs were secured, largely through the students' own initiative: *boys*—clerk, delivery boy, dishwasher, farm worker, general handyman, janitor, junior counselor, mail clerk, "movie extra," office boy, paper boy, pin-setter, radio and electrical repairman, "soda-jerker," usher, waiter; *girls*—bookkeeper, cashier, clerical helper, general office worker, receptionist, switchboard operator, volunteer nurse, etc. The jobs held by the largest numbers of students were those as farm worker, delivery boy, general handyman, office boy, general office worker, and receptionist.

Table 2 shows the amount of time spent working during the summer of 1945. There is not much cause for con-

cern about the average work day and week. One might well view with concern the ninety-hour week reported by some boys. Two groups of workers, farm hands and junior camp counselors, reported these long hours. However, from personal experience the writer knows how difficult it is for the farm worker, who lives with a farm family, to limit his work day. A husky boy just does not feel right about stopping work at five o'clock when the family (at times even girls of his own age) are working until eight or nine o'clock. Everybody knows the pressure that was put on the farmer to produce food during the war years. The students who worked on farms were probably impelled by a feeling that they were playing a vital part in

Twenty-seven boys (58 per cent) worked an average of fifty-one hours a week, or sixteen hours a week more than the average for all the boys. The reader must keep in mind, however,

TABLE 3

MONEY WAGES* EARNED BY 69 NINTH- AND TENTH-GRADE STUDENTS WHO WORKED DURING SUMMER OF 1945

Wages	Boys	Girls
Hourly:		
Average.....	\$ 0.38	\$0.38
Lowest.....	.13	.20
Highest.....	2.50	.71
Weekly:		
Average.....	13.30	9.88

*Does not include board and room earned by several students.

that, since the estimates of time were made by the students and not by their employers, there is a great chance for error. Furthermore, there was a manpower shortage, which necessitated longer working hours. In peacetime more careful control of working hours is probably necessary to avoid exploitation of young job-holders.

EARNINGS

Table 3 indicates that the financial remuneration to the job-holders was equitable. The economic necessity for higher wages was not felt among these students, and few gave this as the reason for working. The writer feels that the young worker is likely to gain a distorted idea of his value as a worker if the wages paid him are too high. Some of these students undoubtedly received too much for their

TABLE 2

AMOUNT OF TIME SPENT ON JOBS BY 69 NINTH- AND TENTH-GRADE BOYS AND GIRLS DURING SUMMER OF 1945

Time Employed	Boys	Girls
Average number of days a week	5½	5
Average length of work day...	6½	5½
Number of hours in work week:		
Average.....	35	26
Smallest.....	2	6
Largest.....	90	48
Number of weeks of employment:		
Average.....	6½	6
Smallest.....	1	1
Largest.....	14	14

winning the war. The writer suspects that, while the work of the junior counselors was important, it may not have been so arduous as that of the farm workers.

services, but, in the writer's opinion, few of them were underpaid. The boy who received the highest hourly rate worked as a "movie extra" with a group of boys from the summer camp which he attended. He earned \$90 in ten days—a much higher rate than was received by the other job-holders. In fairness to the boy it should be said that he realized that "it was more than [he] was worth."

The majority felt that they received "what [they were] worth." Ten boys and girls said that they were paid too much. Eight boys felt that they were underpaid, although five of the eight received more than ten cents an hour above the average hourly rate. Their work may have been more difficult or the working conditions unpleasant, but no explanation was offered for their dissatisfaction.

REACTIONS TO WORK EXPERIENCES

The motives, other than monetary, which stimulated these boys and girls to seek employment are probably typified in the following statements:

Work broadens one's outlook on life.

Work teaches one real living and a sense of responsibility.

I felt that I was doing something instead of wasting time.

The following excerpts from other statements express the students' reactions:

REACTIONS OF BOYS

Meet people

Strengthened body

Teaches responsibility

Get along with people

Experience

Seeing life and being part of it

Education in practical things

Learned how other people felt

Gained self-confidence

Learned how to follow orders and be thorough

REACTIONS OF GIRLS

Contacts with people

Experience

Teaches responsibility

Saw how others worked

Work can be both tiring and boring, but even so—fun

Importance of learning a trade

Patience in dealing with others

Tolerance of people of other races

While many more statements were made, this sampling shows that these students realized the educational values in work, although many failed to see a direct connection between their work and the subject matter taught in school. Mathematics was mentioned by ten students as the only school subject that helped them on the job. One boy who did radio repair work said that both shop and science helped him. One boy said that general science helped him in his work on a farm nursery. Except for these few cases, the value of school training was negated or not mentioned. This gap should be remedied.

Most of the students employed felt that their work had been satisfactory, and they believed that their employers were of the same opinion. Only two, one boy and one girl, felt that they had failed and that their employers thought of them as failures.

ATTITUDES OF STUDENTS WHO DID NOT WORK

The following statements, typical of those made by students who did not work in the summer of 1945 and who do not want to work in 1946, contrast significantly with the statements of the workers:

I would rather take a trip or go to camp than work. I think I can get as much experience that way.

I don't believe I would like to work next summer because there are other things I would much rather do such as receiving additional art instruction, seeing my friends, etc.

I don't want to work because I go to camp and have done so for four years and would rather.

My parents won't let me—besides they think the money might spoil me.

These are sincere statements, and they point to the fact that not all ninth- and tenth-grade students are ready for work experience.

THE PLACE OF WORK CAMPS

If educators believe that work experience is a vital part of training for future citizenship, then it is evident that parents of children in the upper-middle economic group need to be educated to this belief. Further, with the end of the war, jobs for young people will be less plentiful, and this fact poses a problem for school people. It will be maintained, and with considerable justification, that students such as those in the Laboratory School should not compete for jobs with young people and adults who find

work an economic necessity. Yet the statements of those who did not want work surely indicate that in the lives of these young people there is a definite need which must be met if they are to realize the goal of good citizenship in the fullest sense of its meaning. At some time before their college education is finished, they should have a well-rounded work experience.

There is a type of work experience which is gaining in popularity in secondary schools in this country. For many years the American Friends Service Committee has sponsored work camps for college students and more recently for high-school students. In camps of this type the students pay their way and give their services to community projects in less favored areas. These campers not only do necessary work but participate in the management of their own camp. The valuable experiences that come from group living, from working with persons from a different economic level and frequently of a different race, help the youth to learn how to live with his peers, understand the life and work of persons in other economic groups, and develop tolerance for other races. The school would seem to be the logical institution for assisting in the operation of work camps to perform services which would not otherwise be done. Such camps would eliminate competition for jobs between youths in the higher economic levels and those who are impelled to work for economic reasons.

The General Report of the American Youth Commission of the American Council on Education, in speaking of the needs of youth, says:

It is only by providing real experiences of the most vital sort that young people can be given adequate raw material from which to construct attitudes and build character. . . .

Work as a factor in general education [is] second in importance to none.³

It is the writer's belief that work experiences bring a sense of reality and a more mature attitude to those who participate in them. Properly guided, students who work can be helped to face life with more poise and confidence than they could otherwise achieve. Under appropriate conditions they can acquire a social sensitivity which is more or less difficult to achieve, try as we will, in the artificial environment of most schools. Certainly there is a broad field for this type of work camp for the youth of today, and it seems logical that educators should examine the idea with care.

³ *Ibid.*, pp. 108, 117.

THE SCHOOL'S RESPONSIBILITY

Schools such as the Laboratory School have a responsibility for providing guidance and placement for their students. If the students are going to work, they, as well as the employers, should be informed about reasonable hours and working conditions. The school is the logical center for providing this kind of information; for efforts by parents would be isolated and have only slight general effect on either worker or employer. The school possesses enough information about its students to offer practical guidance in selecting jobs and obtaining satisfactory placement. The greatest value might well be the synthesizing of the work experience with the worker's education.

Since there is a trend toward considering work as an important means of training youth for citizenship and since wide peacetime employment of students is doubtful, something should be done by the school to see that all students may have work experience as part of their education.

THE CONTRIBUTION OF A FUSED SCIENCE COURSE TO GENERAL EDUCATION

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*

ANY course in the modern school program earns its place from the contribution that it makes to an education which can be shown to be justifiable for the individual and for society. Therefore the total curriculum, and each part of it, aims (1) to foster the realization of personal potentialities and (2) to help the individual function adequately as an adherent and a contributor to the democratic way of life. With this in mind, the writer made a study to ascertain how a fused science course for Grades XI and XII might provide for such experiences as would make a valid contribution to this twofold educational pattern. The purpose of this paper is to indicate the approach to the problem and some outcomes of the study.

APPROACH TO THE PROBLEM

The preparatory step consisted in a survey of the problem. It included: (1) examining the more recently accepted textbooks to find out what topics are treated and the total number of times each topic appears; (2) reviewing newspapers and magazines read by adolescents to ascertain what subjects are most frequently discussed; (3) reviewing periodicals and books to dis-

cover the points of view of leading educators; (4) holding conferences with science teachers; and (5) interviewing outstanding authors of textbooks. Outcomes of personal experience and local conditions were also given consideration.

Out of these sources came the bases for planning a fused science course—a set of general objectives, an underlying point of view, and criteria for the selection of content. These factors determined the organizational plan. Each is summarized below.

1. In keeping with general objectives, science-teaching should modify the behavior of the individual so that—
 - a) He will use the scientific method in the solution of problems. (That is, he will sense a need in a situation and will follow it through far enough to identify the problem and to tackle it; formulate and refine a hypothesis to act upon; devise more and more rigorous tests to which the hypothesis may be subjected; and arrive at a satisfactory solution which in turn will allow a mental looking forward.)
 - b) His learning of scientific principles or generalizations will be carried to the point of functional understanding. (This understanding will enable him not only to deal intelligently with his environmental contacts but also to appreciate and cherish the beautiful in

natural and physical phenomena in terms of their scientific aspects and to evaluate scientific progress in terms of human worth.)

- c) He will attain a scientific attitude so far as he is able. (Thus he will learn to rely on his abilities and will efficiently discipline and direct his life, tempering it with tolerance and co-operation.)
 - d) He will acquire a sense of the value of the work of the scientist and his findings, coupled with a desire to know more about science and to use its content and method as a way of behavior. (This outlook will help him to select his plot of ground in the vast social terrain and to farm it.)
2. The following statements summarize the point of view or hypothesis which underlies the course.
 - a) The course serves the rank and file of students, leaving the election of more technical courses to those who, in pursuit of later training, may find their purposes better served in the more special areas.
 - b) The plan shifts the emphasis toward the enmeshing of science generalizations with a variety of significant problems of living. (Significant problems are understood to be directly related to man's progress.)
 - c) The materials present the fundamentals of the physical sciences, primarily, and at the same time so integrate them that they will be more meaningful to the student and will make clear to him how they are related.
 3. The questions below indicate the criteria for the selection of content.
 - a) Do the learning activities make adequate provision for pupil variations in interest and ability?
 - b) Is the content organized into problems which illustrate man's quest for basic values?
 - c) Is the material so organized that the pupil can readily assimilate it into a

developing framework of functional concepts?

- d) Will the learning activities help the student toward the realization of valid purposes, and will they help him to apply scientific principles to new situations?
- e) Does the content come from a reliable source, and does it help the pupil to evaluate authority and to see how relative truth is used?
- f) Will the activities selected provide an opportunity for the individual to do creative work and to experience the joy, romance, and adventure that the successful accomplishment of creative work affords?
- g) Is sufficient opportunity provided to help the student judge and measure his progress toward the goals sought?
- h) Is provision made for satisfying the student's intellectual curiosity?

The organizational plan, itself, which grew out of these factors, requires some discussion.

DISCUSSION OF THE PLAN

Ideally, science and democracy are alike in their approach to problems. Each depends on free exploration and association in problem-solving. The quest for a solution is started without prejudice, and factual evidence is demanded which may, by sound reasoning, lead to valid conclusions. Moreover, as new facts are acquired, it may be necessary to change conclusions or to modify actions. Both scientific and democratic practice call for redirecting activities toward the goal sought. Science fits into the twofold educational pattern, stated in the introduction, by its contribution to the kinds of knowledge, to the special abilities,

and to the attitudes, interests, and appreciations needed in a democratic society.

Let us apply this proposition to a portion of a particular unit, "How Can We Buy and Use Personal Goods Wisely?" The unit aims to answer the question only in a general way by providing a basis for making the required judgments. An understanding of the following concepts will provide such a basis:

1. The factors of cost, use, and durability must be considered when we buy personal goods.
2. Consumer advertising can be evaluated in various ways.
3. Brands of goods ought to be compared.
4. In buying and using foods, we must consider purity, preparation, grade, and handling.

The pupil obviously cannot begin with the understandings that the teacher has from an advance analysis of the unit. In the beginning the teacher's understandings are, for the pupil, problems which must be solved. The two examples immediately following, taken from a "Pupil Guide Sheet," will illustrate the task of problem-solving.

HOW CAN WE EVALUATE CONSUMER ADVERTISING?

1. *Exercise.*—Collect pieces of advertising. Select three types, thus: (a) Those which "catch" the eye. (b) Those which appeal to the emotions. (c) Those which appeal to the intellect. Mount your collection on each of three charts in accordance with the preceding classification.

2. *Exercise.*—Using the following procedures, analyze and underline in colors, statements made in advertisements: (a)

Blue, for true statements. (b) Green, for flowery or sentimental statements. (c) Red, for false statements. (d) Brown, for irrelevant or exaggerated statements.

3. *Exercise.*—Find advertisements which make scientific claims. Before each place: A, if accurate; I, if inaccurate; or U, if you are not certain.

4. *Exercise.*—Referring to *Consumers Union Reports*, *Consumers' Guide*, or pamphlets of the American Medical Association, study the evaluation of various personal goods. List your findings under the following topics: (a) Name of product. (b) Statement of worth. (c) By whom evaluated.

5. Prepare a statement of the various ways we can evaluate consumer advertising.

HOW CAN WE COMPARE VARIOUS BRANDS OF GOODS?

1. *Exercise.*—Collect as many brands as possible of headache remedies, laxatives, cold cures, liniments, liver pills, kidney pills, dentifrices, and germicides. Sort these, and place them into groupings of a kind. Tabulate your findings under the following headings: (a) Kind of drug. (b) Name of brand. (c) What the label tells. (d) Additional factors which the label ought to tell.

Or you may prefer to summarize your findings on a large chart for classroom use.

2. *Exercise.*—Visit the grocery store. Compare several brands of canned goods in the following respects: (a) Size of the container. (b) Cost per unit. (c) Has coloring been added? (d) What grade label do you find on the container? (e) Is the label so fancy that it has probably added to the cost? (f) Who indorses the brand? (g) How do its qualities match accepted standards?

Perhaps for (f) and (g) you can find statements from a dependable authority.

3. *Summary.*—On the basis of your observations, which brands seem to be the best? Opposite the name of the brand, outline its good qualities. State what additional information you think you ought to have before you make a decision.

4. *Exercise.*—Examine some “dried” fruits. (a) Do they seem to be weighted? If so, what causes this? (b) Test prunes and other dried fruits and also various brands of fruit juices and catsup for sulphur content. (c) What harmful consequences arise from eating foods which contain sulphur?

5. *Exercise.*—Visit a drug store in order to make a comparative study of shaving creams, face creams, face powders, etc., and make notations in regard to the following: (a) Size of the container. (b) Cost per unit of measure. (c) Does the container itself seem to influence the cost unduly? If so, how? (d) Who indorses the brand? (e) How do its qualities seem to match accepted standards?

Suggestions.—(a) For shaving creams, take into account: “body,” size of bubbles and their importance, freedom from alkaline content, and richness of lather. (b) For face creams: Is the cream smooth, lumpy, greasy, etc.? Is the odor lasting? Does the cream contain mercury or bismuth? (c) For face powders: texture, odor, evenness of color, hard abrasives, presence of starch.

Summary.—In the space below prepare a three-column chart. In the first column, list the brands you prefer so far as your observation permits; in the second, the factors which contribute to each choice you make; and in the third, what additional information you think you ought to have in order to make a final choice.

6. Write an answer to the question: How can we compare various brands of goods?

It will be seen that the pupil draws conclusions at the end of his work on these two problems. The conclusions are the answers to the two problems. The answers, in turn, must agree in content with the understandings 2 and 3 as stated above.

Although the foregoing examples are selected from a unit that is largely of the “environmental” type, the same procedures hold for those units that

adhere more closely to what is frequently termed “pure science.” Because of its underlying philosophy and the fact that there does not actually exist “the subject matter of the subject,” the course undertakes to develop only those pertinent and related understandings which are of functional value. Scientific principles, then, are selected because of their unique contributions to functional understandings. They are considered, therefore, not in isolation—separate, apart, and of value for their own sake—but as an important part of everyday environmental contacts. For example, Archimedes’ principle, having wide ramifications, will not be stressed just once but several times in such functional understandings as: “Energy can be transferred and transformed for use and control.” “Solving national and world problems requires communication to every student.” “All lighter-than-air craft, all boats, and all submarines obey the laws of flotation.” “Weather is the result of the movements of the earth, inequalities in air pressure and temperature, and the amount and nature of the particles in the air.” Obviously principles in addition to Archimedes’ must be applied in order to build up each of these concepts. Also, as new facts arise in the pupil’s experiences, the concepts will grow, and behavior will be further modified—as is true in all democratic living.

Although the course is still in the rather early process of development, the evidence is sufficient for believ-

ing (1) that a fused science course can bring about desirable behavior changes; (2) that, if this be true, it is possible to make definite attempts to bring about desirable behavior changes; and (3) that, after the attempts have been made, their effectiveness can be evaluated. Thus there is justification for the conclusion that a fused science course deserves a place in the curriculum for its contribution to the development of personal potentialities and to the democratic way of living.

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FEASIBILITY OF 6-4-4 REORGANIZATION IN SCHOOL SYSTEMS WITH JUNIOR COLLEGES

II. HOUSING AS A FACTOR IN REORGANIZATION

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INTRODUCTION

THIS article is a summary of a section of a study made in 1944 to determine the feasibility of 6-4-4 reorganization among ten Iowa school systems maintaining junior colleges. An earlier article in the *School Review*^{*} dealt with the faculty as a factor in the feasibility of reorganization. The purpose of the present article is to discuss housing as it would affect reorganization in the junior colleges studied. The basic importance of this factor cannot be gainsaid. Obviously, in discussing reorganization involving greater integration between high school and junior college, one must show that present housing facilities are adaptable or, if not, what new facilities must be provided. In addition, the effect of reorganization on the excellence of the housing facilities is pertinent. An increase in excellence of housing enhances the feasibility of reorganization.

^{*} Robert White, Jr., "Feasibility of 6-4-4 Reorganization in School Systems with Junior Colleges: I. Relation of the Faculty to Reorganization," *School Review*, LIV (March, 1946), 140-47.

CURRENT HOUSING ARRANGEMENTS

In eight of the ten situations the junior college and the high school used the same building. These eight included five systems in which the three-year senior high school and junior college used the same building; one in which the junior high school, the senior high school, and the junior college were housed together; and two in which the junior college was housed with a four-year high school.

The remaining two situations, while not maintaining a separate junior-college building, could not be classified as exhibiting combined and cooperative use of the same building by the junior college and high school. In one of these the junior college was found on a definitely separate floor of the same building used by the high school. In the other situation the tendency toward separation had carried to the point that the junior college was housed with a junior high school in a relatively inadequate building rather than with the senior high school in a very new and well-equipped building. Each of these two

junior colleges was found in the independent-group classification used throughout the study.

All ten systems maintained at least nominal junior high schools, but five of these were only two-year organizations. From the point of view of this study, integration concerns itself mainly with the high school and the junior college, but one can venture the opinion that reorganization would do a service if it should reduce the number of relatively weak two-year junior high schools.

No system had made any actual housing plan looking toward the 6-4-4 plan. Some of these cities had carried through rather recent building programs, but no consideration whatever had been given to this further development.

SPECIALIZED FACILITIES

The use of specialized facilities was studied. The term as used here refers to a space provision other than a mere classroom with only seats and blackboard but without special equipment. The number of facilities in use in each school was found. In addition, the manner of their use, whether co-operative or independent, was determined. These specialized facilities were classified under five headings: (1) general offices and conference rooms; (2) specialized classrooms; (3) fixed student station provisions and their auxiliary rooms, such as laboratories, shops, or related storage-rooms; (4) physical-education and athletic provisions; and (5) other ac-

cessory provisions of a general nature, such as waiting-rooms, teachers' offices, etc. The data showing the specialized facilities available for junior-college services or needs are presented in Table 5. The classifications used in this table were made on the basis of criteria drawn from all

TABLE 5
SPECIALIZED FACILITIES AVAILABLE FOR
JUNIOR-COLLEGE SERVICES OR NEEDS IN
THREE GROUPS OF JUNIOR COLLEGES

SPECIALIZED FACILITIES	AVERAGE NUMBER AVAILABLE		
	High- Associa- tion Colleges	Moder- ate- Associa- tion Colleges	Inde- pendent Colleges
General offices and conference rooms..	5.25	2.50	1.00
Specialized classrooms	8.00	3.25	1.50
Laboratories, shops, storage-rooms, etc.	8.50	5.50	3.00
Physical-education and athletic pro- visions.....	6.50	5.50	4.50
Waiting-rooms, teach- ers' offices, etc.....	15.25	10.00	7.00
Total.....	43.50	26.75	17.00

major areas of organization, as was explained in the first article of this series.

The trend of the evidence in Table 5 is consistent. The outstanding fact is that the number of specialized facilities in the independent junior colleges represents only two-fifths the number of those in the high-association junior colleges and but three-fifths of those in the moderate-association junior colleges. Such relative scarcity must place restrictions on

curriculum offerings, guidance programs, extra-curriculum activities, and other features.

Interesting corollary evidence is afforded in the value of scientific equipment. Each junior college in the state makes to the office of the state superintendent of public instruction an annual report, which includes, among other items, statements of the value of the scientific equipment on hand in each of the fields of biology, physics, and chemistry. The values

TABLE 6
VALUE OF EQUIPMENT IN THREE SCIENCE
FIELDS REPORTED BY JUNIOR COL-
LEGES IN THREE GROUPS

JUNIOR- COLLEGE GROUP	AVERAGE VALUE OF EQUIPMENT			
	Biology	Physics	Chem- istry	Total
High-association.....	\$2,762.50	\$3,700.00	\$3,937.50	\$10,400.00
Moderate-association..	1,800.00	1,300.00	2,250.00	5,350.00
Independent..	506.00	500.00	1,517.50	2,523.50

presented in Table 6 were taken directly from the official reports, which give no indication as to which schools, if any, made allowances for obsolescence. The presumption remains that all values were figured on the same basis. The high-association group had equipment with nearly two times the value of the equipment of the moderate-association group, which, in its turn, possessed equipment with more than double the value of the equipment of the independent junior colleges. These figures more than bear out the implications from the over-all study of the number of specialized facilities available.

The apparent reason for the marked superiority of the high-association and the moderate-association groups is the advantage of supporting one set of facilities and equipment rather than being forced to divide support between two sets. How large must an independent junior college be in order to enable it to support as extensive a set of specialized facilities as are now maintained by the high-association schools in this study? In a similar investigation Koos² has suggested that a separate junior college should enrol at least a thousand students to be able to maintain an equivalent set of specialized facilities. This figure is supported by indirect evidence in the present study. The high-association junior colleges are denied the use of only a negligible number of facilities. These same systems had an average combined high-school and junior-college enrolment of approximately 1,150 in 1941. These facilities would have supported the program of nearly the same number of junior-college students since the essential nature of the space provisions used, with several equalizing exceptions, is the same at both levels.

There is no evidence to suggest a remote possibility that any junior college in this study will surpass an enrolment of six hundred for some time to come. The optimum figure of between a thousand and twelve

² Leonard V. Koos, "Organizational Relationships of Junior College and High School," *Journal of the American Association of Collegiate Registrars*, XVIII (July, 1943), 399-407.

hundred seems removed from consideration for this group of junior colleges. The conclusion follows that separate housing for any of these junior colleges would afford inadequate specialized facilities even with extravagant expense.

Finally, there are potentially available to the moderate-association and the independent junior colleges specialized facilities which are not being used because of organizational arrangements. The evidence was analyzed to show the changes which would occur in each group of junior colleges if complete integration with the high school were achieved. The data presented in Table 7 show that integration would strikingly increase the adequacy of the housing facilities of the independent junior colleges which are now in systems supplied with excellent secondary-school buildings. An exceptional gain would be made in the specialized classroom and laboratory types of facilities.

In concluding this section, it can be pointed out that the high-association, the moderate-association, and the independent junior colleges ranked in that order in the number of specialized facilities available, with the high-association group having more than twice the number possessed by the independent group. This ranking is especially notable in the fields of specialized classrooms and laboratories and shops. Corresponding evidence was noted in the reported values of scientific equipment. From the standpoint of the feasibility of in-

tegration, therefore, such integration would greatly increase the adequacy of the specialized facilities in the independent junior colleges and somewhat increase their adequacy in the moderate-association group.

TABLE 7
EFFECT OF COMPLETE INTEGRATION SHOWN BY AVERAGE GAIN AND BY AVERAGE TOTAL OF SPECIALIZED FACILITIES AVAILABLE FOR JUNIOR-COLLEGE SERVICES OR NEEDS IN THREE GROUPS OF JUNIOR COLLEGES

SPECIALIZED FACILITIES	AVERAGE GAIN IN NUMBER OF SPECIALIZED FACILITIES		
	High-Association Colleges	Moderate-Association Colleges	Independent Colleges
General offices and conference rooms..	0.75	1.75	3.50
Specialized classrooms.....		2.50	6.00
Laboratories, shops, storage-rooms, etc.	0.75	1.25	6.00
Physical-education and athletic provisions.....			1.00
Waiting-rooms, teachers' offices, etc.....	0.75	1.75	5.50
Average number of specialized facilities that would be available.....	45.75	34.00	39.00

ADEQUACY OF PRESENT HOUSING IN RELATION TO PROJECTED 6-4-4 REORGANIZATION

Procedure of projecting enrolments.—

The junior college must be of some reasonable size before the integration of Grades XI through XIV into one school is consummated. The junior-college enrolments reported for 1941 from this group of schools, when con-

trasted with the enrolments in Grades XI and XII, tend to shed some doubt on the possibility of integration. There was a rather general tendency for the enrolment in the junior-college grades to be approximately one-third that of the enrolment in Grades XI and XII. Such a disparity between the numbers of students at the upper and the lower reaches of the new four-year institution would, in effect, truncate any comprehensively organized curriculum, unbalance the extra-curriculum, hamper widespread dual-level teaching, and present other disadvantages. Although a similar relationship can be found in the enrolments of the upper and the lower divisions of a number of four-year liberal-arts colleges, still the ratios reported in this study would weaken portions of the claimed advantages of a 6-4-4 reorganization.

In a specific system any investigation into the adequacy of housing in a 6-4-4 reorganization must take into account the increased popularization of such a junior college. This increased popularization would be the result of the adoption of certain features which are almost necessarily implied by reorganization. One of these, for example, could well be the adoption of a curriculum with varying facets which, operating in conjunction with an adequate guidance program, might aim to attract at least the upper three-fourths of high-school graduates. Hence the discussion must now focus on the determination of the probable enrolments in the

upper unit of the 6-4-4 reorganization. Apparently, the four grades of this unit fall into two distinct classes so far as the forecast of probable enrolments is concerned: (1) Grades XI and XII and (2) Grades XIII and XIV.

The probable enrolment in the first group, Grades XI and XII, is not so difficult to forecast since the high school had already been well popularized in all these systems. Nothing in the Census reports for either 1930 or 1940 indicates any radical change in population in these communities. In consequence it will be assumed that the enrolments in Grades XI and XII in the reorganized units will be the enrolments found in those grades immediately preceding the war years.

The probable enrolments in Grades XIII and XIV present a more difficult problem because it is undesirable to use the 1940-41 enrolments and because there were no integrations within the group to use as a basis.

A hypothesis may be used as the starting-point in endeavoring to forecast the relationship between the enrolment in Grades XIII and XIV and the enrolment in Grades XI and XII. One can visualize that a reasonably successful integrated junior college would attract 80, 80, 60, and 30 per cent, respectively, from each of the fourths of the twelfth-grade class. This would indicate the enrolment of a hypothecated Grade XIII. A further hypothesis will assume that the reten-

tion between Grades XIII and XIV is 65 per cent. Finally, it will be assumed that the enrolment in Grades XIII and XIV will be increased by 25 per cent by enrolment of nonlocal students. This last assumption is based on the fact that the average junior college in this study received slightly better than 25 per cent of its enrolment from outside the local high school. The total effect of these assumptions is to forecast an enrolment in Grades XIII and XIV that will be approximately 60 per cent of that in Grades XI and XII.

These are in the nature of assumptions because there has to be judgment as to the effect of the reorganized curriculum, guidance program, and other features in increasing attendance at the present junior-college level. The date for which enrolments are being forecast is not that of the introduction of the reorganization but rather that after the new institution has been well established, possibly after a period of five or ten years.

Although the nature of the curriculums found in these junior colleges is such that curriculum revision, along with other procedures, affords large opportunity for popularization, the situation probably could not be altered within five or ten years so that the proportion of students in Grades XIII and XIV would be more than double the proportion in 1940-41. This reasoning would serve to limit the proportion after reorgani-

zation to somewhere between 55 and 70 per cent.

Actual enrolment figures from integrated institutions in 6-4-4 systems are pertinent. Data were obtained on the enrolments in 1940-41 for Grades XI through XIV in ten publicly controlled four-year junior colleges existing in the country as part of a 6-4-4 plan. The average percentage that enrolment in Grades XIII-XIV, inclusive, was of the enrolment in Grades XI-XII was 78.4; while the average percentage that enrolment in Grade XIV was of the enrolment in Grade XIII was 64.1. The first of these figures is larger than should be used in projecting enrolments in potential institutions in the Iowa colleges studied, for large numbers of nonlocal students and the structures of the districts affected some of the enrolments. The figure of 64.1 per cent lends support to the 65 per cent used in the hypothecated enrolment developed earlier in this study.

It was also found that, in the case of the youngest integrations, the percentage which the enrolment in Grades XIII-XIV is of the enrolment in Grades XI-XII is much smaller than the corresponding percentages in the older institutions. Apparently the four-year integrations increase the proportion of the enrolment in the upper two years as the institutions become firmly established.

Taking into consideration the defensibility of the specific assumptions made in developing the enrolment of the hypothetical integration, the evi-

dence from other integrated systems in the nation, and the reasoning developed earlier, there is support for acceptance of a probable enrolment in Grades XIII and XIV equaling 60 per cent of the enrolment in Grades XI and XII in the possible four-year junior colleges in these Iowa situations.

In projecting future enrolments in possible integrations, actual enrolments in the various grades were used as a basis. The enrolment in the four-year high school or the lower unit would be the total of the enrolments in Grades VII-X, inclusive. The enrolment in the four-year junior college, or the upper unit, would be the normal enrolment of Grades XI and XII preceding the war years plus 60 per cent of that figure.

Ability of housing facilities to support projected enrolments.—Housing for the elementary grades in a reorganization was not included in this study, since all these systems were maintaining six-year elementary organizations and there was no question of crowding. The problem becomes that of fitting the enrolments for the two upper units into the available housing or of indicating the housing additions that would be necessary. At the time of the survey, data concerning the capacities of the various buildings in the systems were secured and analyzed. In the original study more or less extensive analyses were made of the ability of the housing in each system to support the projected enrolments

in a 6-4-4 reorganization. In this article, such treatment will be accorded two systems, so as to afford the reader a sample of the procedure, and the situation in the remaining eight systems will be briefly summarized.

Albia at present uses a 6-3-3-2 system, housing its junior high school in a building with an indicated capacity of 400. The senior high school and the junior college are housed in a building also capable of accommodating 400. The projected 6-4-4 enrolments include 386 for the high school and 401 for the four-year junior college. The larger size of the upper unit derives from a large rural group.

If the present buildings were used, Grade X could be moved from the present senior high school to the junior high school building. General shop and home economics are not now offered in the junior high school, so that the addition of these specialized facilities would be necessary with the moving of Grade X to that building. Typewriting is not now made available for tenth-grade students in the high school. Such facilities would not only be used by the tenth-grade pupils but could also be used to enrich the curriculum of the other grades in that school, which at present offers a traditional seventh- and eighth-grade course of study and a restricted first high-school year to the ninth-grade students.

The figures on projected enrolment and on the capacity of buildings would indicate that a relatively simple re-

assignment of Grade X to the present junior high school and the addition of shop and home-economics facilities would provide the housing necessary for a 6-4-4 reorganization. It should be pointed out, however, that the present junior high school is housed in an old building erected in 1879. The present senior high school and junior-college building is not fully modern and has the smallest number of specialized facilities of any of the buildings which house an associated junior college in this entire group. The goal in Albia should be the construction of a new building to house the new four-year junior college and the removal of the new high school into the building now used by the senior high school and junior college. The fact of the unsuitability of the present junior high school building, however, does not hamper reorganization, since it is equally as unfitted for the present junior high school as it would be for the new unit of Grades VII-X.

Mason City's projected enrolments in a 6-4-4 reorganization are 1,016 for the four-year junior college and 1,502 for the four-year high school. Capacities in the present buildings are 1,100 in the present high-school and junior-college building and 1,500 in two modern junior high school buildings. Specialized facilities would be adequate for the four-year high school, divided into two schools, in the present junior high school buildings, where a comprehensive junior high school program is now being offered. In Mason City, 6-4-4 re-

organization is readily feasible so far as housing is concerned.

No housing readjustments would be necessary in Boone since the three upper units in a 6-3-3-2 system are now housed in the same building and the indicated capacity of the building would support the two four-year units. In Burlington the present senior high school and junior-college building would easily maintain the new four-year junior college, while the present, modern junior high school buildings would be slightly strained by an excess enrolment over capacity of approximately fifty students. This excess could be offset by a staggered arrangement with near-by elementary schools for a portion of the seventh-grade pupils or by moving a small group of tenth-grade students, moving on a particular block program, to the junior-college building. Integration could be accomplished in Centerville only by setting up a 6-3-5 pattern with the two upper units in separate buildings. At present, Centerville is on the 6-2-4-2 basis. In Creston the two upper units in a 6-4-4 plan could be accommodated in the one present building, which is fully modern. Fort Dodge could maintain the projected enrolment in the four-year high school in its present junior high school building, while the present senior high school and junior-college building would be ample for the four-year junior college. Marshalltown presented a particular problem in that it now operates on the 7-2-3-2 pattern, and all study failed to establish the ability

of present housing to maintain a 6-4-4 plan. However, retention of the seven-year elementary school would allow a 7-3-4 organization, with the two upper units located in separate, adequately equipped buildings. Muscatine was also unusual in that it maintains a junior college and a junior high school in an obsolete building, while the senior high school uses a very modern building. Muscatine's housing is decidedly feasible for an associated junior college, and a reorganization to achieve integration, with the concomitant projected enrollments, could be supported only by adopting a 6-3-5 pattern. Washington's housing is readily feasible for a 6-4-4 reorganization.

CONCLUSION

Among this group of Iowa systems the feasibility of a 6-4-4 reorganization from the standpoint of housing was considerably enhanced by the evidence demonstrating the signifi-

cant increase in specialized facilities available for junior-college needs as the degree of association with the high school increased. There is no indication that any of these junior colleges will reach a size which will give them the advantages of specialized facilities or housing on an independent or separate basis that they would enjoy in association or through integration with the immediately lower secondary grades.

Eight of the group of ten now have housing readily feasible for establishment of the four-year junior college. Two of the group would be obliged to establish a five-year upper unit, which would not have all the advantages of the 6-4-4 reorganization but which would bring more of the advantages of integration than at present exist in those two systems. The building facilities found in this group of schools are generally feasible for a 6-4-4 reorganization.

[To be concluded]

WHY FARM CHILDREN LEAVE SCHOOL

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ACCORDING to the Sixteenth Census only 52.7 per cent of the white farm children in Minnesota, sixteen and seventeen years of age, were in school in 1940. The rank of the state in the percentage of white persons in this age group who were in school as of that time was 47 for the boys and 31 for the girls. In view of the foregoing situation, a study was undertaken at the University of Minnesota of the farm boys and girls who graduated from Grade VIII during the four years 1941-44, inclusive, and who were not in school in 1944-45. The study was confined to two counties in the state, namely, Sibley and Morrison, which had the lowest percentages of all sixteen- and seventeen-year-olds in school in 1940.²

Sibley County is located in the south central section of Minnesota and is classified by the Division of Agricultural Economics as a dairy and livestock type of farming area. There are 2,326 farms in the county, averag-

ing 158 acres, with a valuation of \$11,453 per farm in 1940.³ The proportion of tenancy in that year was 32.6 per cent. Morrison County, which is located in the central section of the state, is in the dairy and the potato-producing area. In 1940 it consisted of 3,418 farms of 150 acres, averaging \$3,847 in value, or about one-third that of the Sibley farms. The proportion of tenancy was 24.3 per cent.

In 1940 Minnesota ranked forty-second among the states in the proportion of rural farm population, twenty-five years old and over, having any high-school education. Sibley County ranked fortieth and Morrison forty-fifth in the state, with 10.9 per cent and 9.4 per cent. The median years of schooling for all adults in Sibley County was 7.9 years for males and 8.0 for females. The corresponding figures for Morrison County were 7.7 and 8.0 years.⁴

The two counties in which the study

¹ This study was made with financial assistance provided from the research funds of the Graduate School of the University of Minnesota.

² *Education of the Farm Population in Minnesota*. Bulletin 377. St. Paul, Minnesota: Minnesota Agricultural Experiment Station, 1944.

³ *Sixteenth Census of the United States: 1940. Agriculture*, Vol. I, "First and Second Series, State Reports, Statistics for Counties," Part 2, County Table 1, pp. 16-23.

⁴ *Sixteenth Census of the United States: 1940. Population*, Vol. II, "Characteristics of the Population," Part 4, Table 27, pp. 82-87.

was made include fewer persons of Scandinavian descent than are found in other parts of the state. The population in Sibley is largely of German derivation, while German and Polish are equally prominent in Morrison. During the 1944-45 school year, fifty-eight rural elementary schools and eight parochial schools sponsored by the Lutheran church were operated in Sibley county. In addition to the 116 rural elementary schools in Morrison County, the Catholic church has five elementary schools—three in villages and two in the city of Little Falls. The five high schools in Sibley County are independent, whereas three of the five in Morrison County are consolidated. A Catholic high school for girls at Little Falls is the only parochial secondary school in either county.

EIGHTH-GRADE GRADUATES ENTERING HIGH SCHOOL

In the two counties during the four selected years, a total of 2,085 farm children, of whom 51.6 per cent were boys and 48.4 per cent were girls, completed Grade VIII. The percentage of these graduates entering high school or other secondary schools during the four years was 69.3 in Sibley County and 59.8 in Morrison County.

Nearly all graduates from public elementary schools located in towns of the two counties and in the city of Little Falls entered high school, whereas only 57 per cent of the graduates from rural schools and 67.1 per cent of the graduates from parochial

schools proceeded beyond Grade VIII. It may be assumed that, since the farm graduates from the town and city schools live relatively close to high schools, transportation does not constitute a problem for them. Adjustment to high school is probably also not so difficult for them as for pupils coming from other types of schools.

At the time data for this study were collected in 1945, it was impossible to trace all the pupils who had entered high school after having graduated from Grade VIII during the four previous years but who had dropped out of high school. Even so, Table 1 shows that the percentage of graduates from elementary schools who were in high school in January, 1945, had been reduced from 69.3 to 59.6 in Sibley County and from 59.8 to 45.8 in Morrison County. Aside from the proportions of the graduates who failed to enter or to remain in high school, there were a number of pupils in each county who permanently failed the eighth-grade examinations or who, for other reasons, did not complete the requirements for graduation from the elementary school. In Sibley County fifty-three pupils who had failed the State Board Examinations in 1941-44, inclusive, had not removed the failures in 1945. During the same period 119 permanent failures were recorded in Morrison County.

Evidence to show whether the more capable pupils attend high school was obtained by tabulating the scores on the Minnesota State Board Examina-

tions for the eighth-grade graduates in 1941. The means of the scores for all subjects making up the examinations in Grade VIII—English, general mathematics, general science, and social studies—were significantly higher for the pupils in high school than for those who did not enter and for those who entered and later withdrew. It was noted also that the means of the scores for the pupils who entered and

44, inclusive, who did not enter high school. Although several graduates of the elementary schools were in military service, usable returns were received from 41.6 per cent of the total number. The proportion of returns ranged from 37.6 per cent for the 1941 graduates in Morrison County to 59.5 per cent for the 1944 graduates in Sibley County.

The survey revealed that children

TABLE 1
ACCOUNTING OF FARM PUPILS WHO COMPLETED GRADE VIII
IN TWO MINNESOTA COUNTIES IN 1941-44, INCLUSIVE

ITEM	SIBLEY COUNTY PUPILS (619)		MORRISON COUNTY PUPILS (1,466)	
	Number	Per Cent	Number	Per Cent
Unaccounted for.....			15	1.0
Did not enter high school.....	190	30.7	574	39.2
Entered high school.....	429	69.3	877	59.8
Dropped out of high school.....	60		205	
In high school January, 1945.....	369	59.6	672	45.8

dropped out of high school were higher, except in mathematics, than for those who did not enter high school.

SURVEY OF NON-HIGH-SCHOOL GROUP

A survey of the graduates who did not enter some type of secondary school was undertaken to find out why farm boys and girls do not attend high school and to gather information regarding the backgrounds, interests, and future plans of this group. Schedules were mailed by the county superintendents to the eighth-grade graduates of each of the years 1941-

who did not enter high school usually were members of large families. Very few lacked brothers or sisters. The average number of children per family in the Sibley County group was 5.3; in Morrison County, 6.5. Failure to attend high school on the part of these recent graduates is in conformity with the educational pattern of their older brothers and sisters. Of 736 older children in the families, 115 had not completed Grade VIII, and only 138, or less than one-fifth, had proceeded beyond Grade VIII.

No inquiry was made as to the for-

mal education of the parents. A check on the occupation of the mothers before marriage showed, however, that they normally engaged in farming or housework and that few of them had had any business or professional experience.

The majority of these boys and girls had not made definite occupational choices. In fact, they expressed few occupational preferences except that a number of the boys said that they were looking forward to being farmers.

Only a small proportion of the graduates had plans for additional schooling of a formal nature. Many of them were interested, however, in the possibility of taking short courses, the interests of the boys tending toward offerings in mechanics and agriculture and those of the girls toward commercial and homemaking subjects.

The principal reasons given by the eighth-grade graduates for not entering high school were that (1) they were needed at home, (2) they did not care for school, and (3) transportation was not accessible.

The school administrators are inclined to feel that the statement of the children and their parents that the children are needed at home is simply an excuse for not going to high school. The administrators are also inclined to believe that the lack of parental encouragement is more of a factor than is implied by the responses obtained from the children.

That distance from high school con-

stitutes an important factor in registration is shown in the Little Falls district, which has the largest area of any high school in the two counties. During the four-year period, 70 per cent of the graduates who lived within a radius of five miles entered high school, while only 38.1 per cent in the 15-20 mile zone went beyond Grade VIII. Again in this same high-school area, 69.2 per cent of the graduates in townships not served by buses terminated their formal education at the eighth-grade level, in contrast to 36.3 per cent of the graduates who lived in townships served by buses.

Only 10 per cent of the boys and girls who had graduated from Grade VIII and who were not in high school reported that they belonged to some type of organization at the time the survey was made. The few who participated in these activities held memberships in organizations such as 4-H Clubs, Scouts, and youth groups in various churches. A majority of the children, however, did appear much interested in social and recreational activities. The activities for which the boys expressed preferences included movies, athletic games, and hunting and fishing. The girls were also interested in movies and, to some extent, in games. Otherwise they appeared more interested in parties and dances than were the boys of similar age.

Hobbies did not seem to be so popular, especially with the boys, as were organized social and recreational activities. The making of collections of

various sorts, including stamps, songs, coins, scrapbooks, matches, pins, autographs, and model planes, were the more popular of the hobbies. Photography appeared to be of considerable interest to both sexes. Music was designated as a hobby by a few of the respondents, whereas others classified music as a form of recreation.

DROP-OUTS FROM HIGH SCHOOL

In Morrison County 877 of the farm boys and girls who completed Grade VIII during the four years 1941-44 entered high school or some other form of secondary education. By January, 1945, 205, or 23.4 per cent of this number, had withdrawn from school. The withdrawals for the 1941 class numbered 45, 33, and 13 in Grades IX, X, and XI, or 37.3 per cent of the pupils who entered Grade IX from that class. Among the withdrawals, 59.5 per cent were boys and 40.5 per cent were girls.

In some instances withdrawal from school occurred so soon after matriculation that achievement tests had not been given or other records accumulated. Data sufficient for tabulation were secured on 150 of the 205 drop-outs, all of whom withdrew before entering Grade XII. A majority of the drop-outs left school in Grade IX, and about two-thirds of the ninth-grade drop-outs failed to finish the year.

A distribution of school marks earned by the drop-outs revealed that 48 per cent of the drop-outs ranked in the third quarter of their classes, with

29 per cent falling in the lowest quarter. Little relationship appeared between the intelligence quotients of the drop-outs and the school marks that they received.

Only a minority of the drop-outs actually failed in school, but the majority of those with failures had intelligence quotients below 100. Failures in English were most frequent for the boys and in mathematics for the girls.

The school attendance of the boys who later dropped out was more irregular than that of the girls, owing in part, perhaps, to the existing shortage of help on farms. More than half of the boys and approximately one-third of the girls were absent 10 per cent of the time or more, whereas 40 per cent of the girls and fewer than 20 per cent of the boys were present at least 95 per cent of the time, thereby being considered regular in attendance.

Pupils who left high school did not participate to any large degree in athletics or other activities. The superintendents suggested several reasons for this nonparticipation: (1) many of the pupils do not remain long enough to become identified with activities; (2) the pupils usually leave on buses at the close of the day; and (3) those who drop out ordinarily do not have as many special talents as those who continue in school.

Two reasons for the withdrawals from high school, as given by the pupils when leaving or as assigned by

the superintendents, stand out. They are lack of interest and lack of parental encouragement. Transportation difficulty was thought to be a minor factor, although it was frequently assigned as a reason for not entering high school.

The health of the drop-outs was usually judged to be normal. In contrast, a lack of social adjustability was characteristic of more than half of those who withdrew. A majority of the pupils were considered to be moderately industrious, and poor study habits were placed before lack of application as a reason for unsatisfactory school work.

The cultural influences in half the homes of the pupils, whose environments were familiar to local school people, were thought to be poor. Likewise, the parental attitude toward continued education was definitely not one of strong encouragement.

CONCLUSIONS

It would seem that certain conclusions, as applied to the two counties in which this study was based, can be deducted from the data herein presented.

1. The percentage of pupils who enter high school after completing the grades in rural elementary or elementary parochial schools is lower than the percentage who enter from towns or districts maintaining high schools.

2. The pupils who continue through high school are more capable scholastically, as a group, than those who do not go to high school.

3. The principal reasons why more farm boys and girls do not go to high school are (a) lack of encouragement on the part of parents and other adults in the community, (b) inaccessibility to high school because of distance or lack of transportation, (c) lack of school prestige, and (d) lack of an orientation program in the elementary school.

4. Except for isolated cases, the lack of finances and the shortage of help on farms normally do not keep pupils from going to high school.

5. Factors such as lack of interest on the part of pupils, failure to adjust, lack of parental encouragement, and the farm help problem are more often causes for dropping out of high school than the factor of scholastic inability.

IMPLICATIONS

It was not within the province of this investigation to suggest a program which would encourage more farm boys and girls to continue their education beyond the elementary school. Some implications from the findings are set forth below, however, since these appear basic to the development of such a program.

1. The prestige of the high school in the community must be raised to the point where graduation from the secondary school is held as a minimum educational standard.

2. A program for acquainting children with the nature of secondary education should be projected in the upper grades of the elementary school.

3. The type and quality of work

done in elementary schools should be such as to give pupils the foundation for high school and to create in them a desire for continued education.

4. There is need for articulating the training received in detached rural elementary and elementary parochial schools with the program of the high school.

5. All pupils removed at some distance from high school should be provided with transportation.

6. State aids are essential for equalizing transportation charges and for

helping provide facilities and services where assistance is needed.

7. More attention must be directed to helping pupils in the high school make satisfactory adjustments and realistic future plans.

8. The offerings of the high school should be such as to meet the educational needs of the farm boys and girls included in the total enrolment.

9. The public high school has an obligation to provide a program of part-time instruction for persons who do not register as full-time students.

SELECTED REFERENCES ON THE EXTRA-CURRICULUM*

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THE thirty-six references selected from current writings relating to the extra-curriculum reflect the result that the cessation of activities has had on the schools. There has been a decrease in the number of items having to do with work experience and an increase in references concerned with the relation of the schools to the community. Interest in summer recreation programs and summer camps is apparently on the increase, and student self-government has also received attention. One article reports a research study of the socioeconomic factors influencing participation in the extra-curriculum. The articles devoted to other phases of the extra-curriculum program provide a body of materials which will be of great help to the teachers who are concerned with organized student activities.

354. ALFORD, CECIL H. "A Student-sponsored Community Rink," *School Activities*, XVII (October, 1945), 60-61, 70.

Reports a project in which high-school students maintained a winter skating rink for community use.

* See also Item 9 (Boodish) in the list of selected references appearing in the January, 1946, number of the *School Review* and Item 112 (Kelley and Faunce) in the February, 1946, number of the same journal.

355. BARRETT, LAWRENCE A. "Let's Book School Talent," *Nation's Schools*, XXXV (June, 1945), 46.

Suggests ways in which student-activity groups may contribute to programs of social and civic organizations in the community.

356. Consumer Education Series: Unit No. 3, *Time on Your Hands: Choosing and Using Recreation* (A Unit for High School Students). Washington: National Association of Secondary-School Principals, 1945. Pp. 122.

Points out opportunities for youths' participation in constructive leisure-time activities. Lists source materials as well as the name and address of outstanding organizations in each field.

357. DAVIS, HARRIET EAGER. "Summer Work Camps," *School Executive*, LXIV (August, 1945), 56-58.

Discusses the growth of work camps for community service as a means of developing a better understanding of citizenship among high-school students.

358. DAVIS, WATSON. "Science Clubs of America—an Educational Force for the Future," *Education*, LXV (March, 1945), 406-8.

Calls attention to Science Clubs of America as a guide to youth's exploration in science. Advises beginning with elementary-school pupils.

359. DUFF, JOHN CARR. "One Suggestion for High School Commencements," *School Activities*, XVII (December, 1945), 125-26, 129.

Advocates stressing the achievements of a group as well as of individuals in the commencement address. Outlines points which such a presentation might include.

360. ELSDON, CYRIL L. "Are Your Internal School Accounts Audited?" *Nation's Schools*, XXXV (April, 1945), 44.
Reviews trends in the auditing of student funds and refers to the legal status of pupil organizations.
361. *The Evolution of Susan Prim*. A Story developed by the Lincoln High and Elementary School Faculties in co-operation with the Staff of the Secondary School Study of the Association of Colleges and Secondary Schools for Negroes. Tallahassee, Florida: Lincoln High School, 1944. Pp. x+62.
A school administrator re-evaluates the educational program in the light of community needs and develops an activities program which improves teacher-pupil relationships.
362. FISHER, MARY CECELIA. "Clubs Are Trumps in Guidance," *Nation's Schools*, XXXVI (August, 1945), 42-43.
Calls attention to invaluable opportunities for personal guidance when student activities are planned around organized groups, such as a dramatics club.
363. GILPIN, MILDRED G. "A Live Club—a 'Dead' Language," *School Activities*, XVI (February, 1945), 219-20.
Describes the organization of a Latin club and discusses programs, publicity, finance, and membership.
364. GLICKSBERG, CHARLES I. "Extracurricular Activities and School Morale," *American School Board Journal*, CX (May, 1945), 36-37.
Contends that interest in school activities is an index to school loyalty. This is an area in which students, staff, and administration have a part.
365. GRIGGS, RUTH MARIE. "Get an Early Start on Your Yearbook," *School Activities*, XVI (January, 1945), 167-68.
Points out essential factors which contribute to the organization of a yearbook campaign in order to make the venture a financial success.
366. GRUBRICK, IRENE M. "School Clubs Can Work," *School Activities*, XVII (September, 1945), 6-9, 30.
Discusses the organization of student groups and suggests numerous clubs in which pupil and teacher may work together in an informal yet constructive atmosphere.
367. HARVEY, C. C. "Improving Assembly Programs in Secondary Schools," *High School Journal*, XXVIII (November-December, 1945), 275-78.
Advocates more adequate assemblies through the services of a director who uses student ideas and talent. Lists recent theses relating to school assemblies.
368. HARVEY, C. C. "Assembly Programs for January," *School Activities*, XVII (December, 1945), 145-48.
Calls attention to reports of research on assembly programs. Outlines examples relating to the school paper, debate, an exchange program, and a forum in which responsibility is taken by various school organizations.
369. HELBLE, HERBERT H. "Student Council Adventures in Group Discussion," *American School Board Journal*, CXI (December, 1945), 31-32, 80.
Points out the values of student discussions as training in democracy, when the group is well organized and questions are thoughtfully selected.
370. HIGHFILL, ANNABELLE H. "The Yearbook Should Be under Way," *School Activities*, XVII (November, 1945), 103-5, III.
Outlines accepted procedures in the production of a school annual. Considers staff organization, planning of content, pictures, and finance.
371. HORSMAN, RALPH D., and TAYLOR, MARGARET. "A Functioning Student

- Court," *School Activities*, XVII (November, 1945), 83-84, 119-20.
Describes experiences gained through four years of student-court activity. Points out opportunity afforded students for participation in democratic living.
372. HUGHES, R. O. "Junior Town Meeting," *School Activities*, XVII (October, 1945), 43-44.
Points out the value in organizing discussion groups which provide for participation by students, teachers, and community.
373. JENNINGS, GEORGE. "Organization of a Radio Workshop," *School Activities*, XVI (May, 1945), 326-29.
Calls attention to procedures used in setting up a high-school radio club. Figures illustrate steps in the development of the group and its broadcast programs.
374. KONOLD, A. EWING. "Housing the Student Participation Program," *School Activities*, XVII (November, 1945), 85-86.
Reports the results of a small sampling survey in California schools on practices in housing extra-curriculum organizations and makes suggestions in regard to the provision of more adequate facilities.
375. KUMPF, CARL H. "Organizing a Summer Recreation Program," *Journal of Health and Physical Education*, XVI (June, 1945), 322-23, 350-52.
Outlines a comprehensive plan of informal learning conducted by educational and social agencies of Rochester, New York. Well-trained teachers have contributed a great deal to this program.
376. MACCAMPBELL, JAMES C. "An Experiment in Pupil Self-government," *Ohio Schools*, XXIII (May, 1945), 218.
Reports experience in classroom government as a means of placing a degree of responsibility upon the students.
377. O'DONNELL, CATHERINE F., and McNALLY, WAYNE W. "Credit Where Credit Is Due," *School Executive*, LXV (October, 1945), 60-61.
Describes a plan designed to interest junior high school pupils in a wide range of activities through a system of points leading to a certificate of merit.
378. OTTO, WILLIAM N., and FINNEY, NAT S. *Headlines and By-lines*. New York: Harcourt, Brace & Co., 1946. Pp. x+454.
A well-illustrated book on high-school journalism, dealing with the reading, writing, and publishing of a school newspaper. Selected references and a glossary of newspaper terms are helpful.
379. PATTY, WILLARD WALTER. "What Basis for School Activities?" *School Activities*, XVI (January, 1945), 163-66, 174.
Analyzes factors which have determined school activities and formulates standards and examples which may be used as bases for more effective programs.
380. ROTHENBUSH, VERONA F. "Dramatics Class: Proving Ground for Democracy," *Clearing House*, XIX (May, 1945), 561-64.
Describes student-teacher planning of dramatics which led to personality development as well as excellent play productions. Mentions several plays appropriate for junior high schools.
381. SIMLEY, IRVIN T. "Recreation Adapted to Youth's Expressed Interests," *American School Board Journal*, CXI (October, 1945), 35-37.
Reports the results of a questionnaire which shows the preferences of high-school and junior high school boys and girls in leisure-time activities. Suggests bases upon which to build an effective recreation program.
382. SMITH, HENRY P. "A Study in the Selective Character of American Secondary Education: Participation in School Activities as Conditioned by

Socio-economic Status and Other Factors," *Journal of Educational Psychology*, XXXVI (April, 1945), 229-46.

Reports the results of a research study which shows that socioeconomic and social factors have a definite influence on the participation of high-school students in extra-curriculum activities.

383. SOLLBERGER, DWIGHT E. "Some Factors Influencing Success of Camp Nature Program," *School Science and Mathematics*, XLV (November, 1945), 740-42.

Presents the results of a questionnaire in which counselors list factors that contribute to the success of a natural-history program.

384. STARR, G. G. "A Student Activity Point System," *School Activities*, XVII (September, 1945), 10-13.

Describes a point system in a junior college designed to limit the number of activities in order to secure larger student participation. Four tables show points earned and the relation of marks to extra-curriculum responsibility.

385. STEARNS, HARRY L. "Responsibility of the Schools for Work Experience,"

School Executive, LXIV (August, 1945), 50-52.

Presents a philosophy in regard to work experience and points out the value of such a program in developing attitudes which identify an individual with his project.

386. VAGNER, RICHARD. "A Western State Holds a Summer Band Clinic," *School Activities*, XVI (March, 1945), 260-61.

Describes a two weeks' course for high-school musicians in Montana. Discusses organization, classes, schedule for practice, and recreational program, and evaluates the results of this venture.

387. WALTHER, MARGARET. "The Composition II Class Produces an Assembly," *English Journal*, XXXIV (December, 1945), 545-49.

Describes steps taken by a class in planning and presenting a Memorial Day assembly program. Believes that this approach leads to functional English composition.

388. ZACHAR, IRWIN J. "An Assembly Committee at Work," *English Journal*, XXXIV (November, 1945), 476-80.

Reviews the organization of a faculty-student assembly group in a city high school. An assembly program is included, and steps in its development are explained.

Educational Writings

★

REVIEWS AND BOOK NOTES

A DEVELOPMENTAL APPROACH TO CLARIFICATION OF GOALS OF EDUCATION.—

Teacher-training institutions will rejoice in the availability of a new textbook¹ in the history of education, a field long neglected and unfairly treated in the professional program of studies. With the war over and reconstruction well under way, our educational curriculums will now be broadened, and a more liberalizing background of knowledge will be provided. Without the employment of pressure methods, the American people are fast becoming international-minded; and there is no other teacher-education subject that can contribute more than can the history of instruction to the breadth of scholarship and the depth of understanding so sorely missed in many of our teachers.

Students in schools of education should be conditioning their minds and enriching their thinking with a kind of content that touches the widening fields of knowledge at many points. No other single factor can give greater credit and prestige to the teaching profession than the cultivation, purposefully and joyously, of a superior quality of scholarship. When the American men and women who are at the controls in the classroom day by day are more universally recognized as exemplars of culture and the apostles of learning, we shall then assume a position of leadership among the nations in education as well as in the industrial and commercial areas. Ulich's book provides a vast range of serviceable infor-

mation based solidly on historical, philosophical, and scientific foundations.

This volume was preceded in 1940 by the author's *Fundamentals of Democratic Education*, in which there is an invigorating discussion of instructional objectives and motivation. In this second book the developmental approach is employed. Here we have not so much the detailed story of evolving institutions as the romance of ideas—imperishable and enduring, forces that strengthen the bloodstream of our civilization. These pages do not so much reveal the everyday busy-work of the school and the office as they depict the mind of educational genius thinking about the possibility of building a more substantial world of sound doctrine and harmonious human relationships. "In this way the student may be led to understand how all profound and progressive thought and action emerge from the hopes and conflicts of men which he can reconstruct in his own mind" (p. vi).

The range of intellects covered is from Plato through John Dewey. Others brought into central focus are Aristotle, Plutarch, Quintilian, Jesus of Nazareth, Comenius, Locke, Rousseau, Benjamin Franklin, Thomas Jefferson, Pestalozzi, Herbart, Froebel, and Ralph Waldo Emerson. Inclusion of these well-known American names is an evidence that in recent years we have been making strides as a cultural factor in the world. Our more sympathetic colleagues abroad will recognize the merit of these American leaders and accept them as deserving of a prominent place in this galaxy of educational stars. The prospective reader will want to know the titles of some of the key chapters: "The

¹ Robert Ulich, *History of Educational Thought*. New York: American Book Co., 1945. Pp. xii+412. \$3.00.

Ancient Church," "The Medieval Church," "The Humanist Evolution," "The New Method of Thinking," "The Awakening of the Middle Class Spirit," and "Concluding Remarks." In this final section two major questions are raised: (1) Where do we stand? (2) What are the chief tasks we must face in the future? Two sets of problems confront us: (1) What is science going to do with us and for us? (2) How much benefit can be derived from the pursuit of improved forms of political government?

Three great tasks stand in our way as we look ahead and hope for better things. First, we must learn to make the most of the wide variety of talent represented in the native intelligence of our youth; and this involves utilization of those activities that stir the emotions as well as occupy the reasoning power of our students. The shop, the athletic field, and club life serve as a motivation force that tends to unify us and galvanize our individual and collective efforts to accomplish what our ideals and resolution urge us to do. A second impelling task is for us to discover a more emphatic and creative relationship between the formal work of the school and the vocational responsibilities that our young people must face. The third command is for us to reconcile vocational training "with a liberal education which prepares man to enrich himself through contact with the cultural values of human life" (p. 348).

This reviewer echoes a tribute to this newest Ulich publication made by a prominent authority on quality and timeliness in our professional literature, Dr. I. L. Kandel:

It is exactly the kind of book that is needed to lift the study of education which is in the doldrums because it has degenerated into preoccupation with the immediately contemporary. The book should be an invaluable contribution to the study not only of the history but the philosophy of education.

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RESPONSIBILITIES AND QUALIFICATIONS OF SCHOOL COUNSELORS.—It is the function of counseling to help boys and girls meet the social, economic, and educational requirements of life in modern society. After a period of rapid growth during the past thirty years, counseling is today regarded as one of the most significant aspects of the educational program. No other service in the secondary school requires broader understanding of the problems and interests of youth.

The school counselor's responsibilities are to co-ordinate guidance activities within the school, to stimulate and train other educational personnel in the performance of guidance duties, and to perform specialized services in which they alone are qualified to function. An investigation of this type of service in the schools, initiated in 1940 in co-operation with a committee of the National Vocational Guidance Association, is the subject of a recent report.¹

A selection was made by competent authorities of one hundred exceptionally successful secondary-school counselors from a wide geographical area and from school systems of different sizes. Using case-study techniques, the observers studied the work of these counselors through personal interviews, group conferences, and questionnaires to determine (1) what their functions were, (2) what experiences contributed to their competencies, (3) what additional experiences they desired, (4) what patterns of function and experiences could be identified, and (5) what relationships existed between the patterns of function and of experience.

This work contributes a timely body of research data, valuable to everyone connected with the adjustment problems of youth both within and outside the school situation. The report indicates that two important aims of the study were accomplished:

¹ Rachel Dunaway Cox, *Counselors and Their Work: A Study of One Hundred Selected Counselors in the Secondary School*. Harrisburg, Pennsylvania: Archives Publishing Co., 1945. Pp. x+246.

(1) to provide basic materials for committee recommendations with reference to preparation for guidance service and certification of counselors and (2) to provide a more adequate basis for the selection of guidance workers. The many functions of counselors are discussed in relation to their work with pupils and parents, their work with colleagues within the school, and their activities within the community. An analysis of the characteristics of the selected counselors themselves was undertaken to discover the secrets of their success. Inquiry was made into such factors as their experiences in childhood, in family life, in business and industry, in the community, and in work with economic and cultural groups.

According to this report, school counselors are not so well trained professionally as they should be to give competent guidance to boys and girls in the public schools. In a series of observations in the rehabilitation clinic at a large hospital, the reviewer identified a number of young people who had wasted two or more years in training for work for which they lacked the essential aptitudes and motivation. These mistakes were often to be explained by the failure of the schools to provide appropriate guidance services.

Long teaching experience and sympathetic understanding are indicated as the doors through which more than 90 per cent of these successful counselors entered their present educational work. Certainly the ability to understand and to get along with people is essential. However, the counseling functions are both too broad and too specialized to be attempted without a great deal of professional training.

The closing sections of this volume provide a summary of the services of the counselor and indicate answers to many questions of interest to workers in the field. The report reflects the thinking of many successful educators and will undoubtedly stimulate the selection and the training of better personnel workers for the schools.

The study is limited in scope by virtue of

the fact that guidance service, apart from that provided by the classroom teacher and the administrative staff, is comparatively new. Many desirable goals necessary in the maturing of a new profession are left untouched. However, as functions become more clearly defined and the place of the student personnel worker becomes more secure, similar investigations will undoubtedly indicate a wider array of goals and ideals, especially in the area of mental hygiene.

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RECREATIONAL PROGRAMS FOR ATYPICAL YOUTH.—Physical-education programs in the modern schools often exclude the small segment of the pupil population which consists of children who, through some disability of malfunctioning, must be restricted in their activities. The physical and mental needs of this group should not be disregarded, and specific provisions to meet their individual requirements must be a planned portion of the school program. The United States Army Medical Department, recognizing the shortcomings of stereotyped exercises and activities for convalescents and handicapped recruits, instituted a diversified program of reconditioning and rehabilitation that established the individual soldier and his needs as the basis for specialized activities. This same goal may be reached in the schools through the efforts of health and physical-education teachers who can appraise the problem and devise a stimulating program for the young persons who should have modified physical training. To aid the progressive teacher in this work, a recent book¹ has been published which senses the

¹ Doreen Foote, *Modified Activities in Physical Education: A Handbook of Games, Procedures, Classification and Organization for Pupils in Junior and Senior High School Who Cannot Participate in the Regular Physical Education Activities*. New York: Inor Publishing Co., Inc., 1945. Pp. x+102. \$2.00.

problem and offers a practical program of recreational physical education for specialized groups.

Vital to a proper understanding of the role of the modified program in physical education is an understanding of the aims. The statement of aims in this book, taken from a bulletin on special activities published by the California Department of Education, reveals the social and emotional advantages as well as the physical stimulation and development associated with a modified program.

Seven chapters of the book develop brief treatments of many activities designed to meet the aims of the program. Games such as paddle tennis, clock golf, bait-casting, dominoes, and many others are enumerated and explained. Of special note are the chapters dealing with hobbies as an integral part of a planned program and with camping skills as a means of introducing all children to the fascination of the great outdoors.

The final two chapters consider posture-correction activities and rhythms for the corrective groups. Relays and popular games of low organization, such as dodge ball, three deep, and newcomb, are advocated as effective instruments of recreational and corrective design.

Assistance is given to the teacher of specialized groups through the eighteen diagrams which are presented in the volume, and a helpful bibliography and index are included.

While this book is not an exhaustive treatise on the subject of recreational and informal physical activities, nor is it precisely definitive in the explanation of the games listed, nevertheless it is a valuable contribution to the literature of this field. It stresses diversification in planning, which creates excellent motivation for pupil participation, and it presents the needful physical and mental stimulation in attractive activities that cannot fail to capture the child's imagination and interest. Every physical-education teacher may read this volume with profit, for the sake both of the theory that is developed and of the practical activities that

are outlined for immediate inclusion in the school program.

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EDUCATION AND RURAL LIFE IN AFRICA.

—Development of international appreciation is one of the outgrowths of World War II. The San Francisco Charter, the establishment of the United Nations Organization, and the activities of the United Nations Relief and Rehabilitation Administration are expressions of the growing interest in this field. Teachers in American schools are using materials which lead to a clearer understanding of the peoples of other countries.

A recent survey¹ made in central and west Africa presents a summary of the work carried on by missionary groups to improve the educational opportunities and the living conditions of the peoples of that part of the world. Early chapters give information about social institutions and economic resources in Liberia, the Belgian Congo, French Cameroons and French Equatorial Africa, Nigeria, the Gold Coast, and Sierra Leone. For example, "The Belgian Congo," chapter iii, describes the provinces, chief towns, populations, and principal industries. A summary of the work of Catholic and Protestant missions follows. Names of schools and hospitals are given, and prominent individuals, with whom interested persons might correspond, are often mentioned.

Chapters vi and vii discuss governmental policies with regard to colonies and agriculture. There follow eight chapters dealing with a number of particular fields covered by the survey. Chapter viii reviews agriculture; chapter ix discusses research; chapter x, education and a higher standard of life. The next three chapters present several phases of education, including rural, second-

¹ Jackson Davis, Thomas M. Campbell, and Margaret Wrong, *Africa Advancing: A Study of Rural Education and Agriculture in West Africa and the Belgian Congo*. New York 10: Friendship Press (156 Fifth Avenue), 1945. Pp. x+230.

ary, and higher education, and the staffing of schools. The remaining chapters describe a literacy program and the relation between government schools and the Christian missions which maintain educational programs.

In chapter xii, "Staffing of Schools," the surveyors point out the close relationship between agriculture and education in the development of local crafts. Emphasis is laid on the importance of music and drama. Attention is called to the work of teachers' organizations designed to improve salaries and working conditions. The authors believe that there is a need for foreign-trained teachers to aid in the development of normal centers; and, to meet this need, Britain and the United States are giving increasing numbers of scholarships to worthy students for study

abroad. The exchange of staff, within the African area itself as well as with the southern United States, is suggested.

This survey was conducted by a competent committee of three well-qualified persons. These surveyors were familiar with Africa, and they have presented an accurate picture of the conditions that they found. The volume is illustrated by more than forty well-selected pictures showing geographical aspects, occupations, and customs of the area. A number of useful maps are also included. Portions of this book may serve as source material for students interested in the social conditions and the educational institutions of Africa.

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